CONSTRUCTION NEWS

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

The following Plans (P.) and Specifications (S.) are on file and may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.	Work.	Place.	See issue.
5- 7*	Dredging,	Bangor, Me. (S.)	4- 9
5- 7*	Jetty,	Savannah, Ga. (S.)	4- 9
5- 7*	Dredging,	Wilmington, Del. (S)	4- 9
5- 9*	Dock,	Chicago, Ill. (S)	4-16
5- 9*	Dredging,	Chicago, Ill. (S)	4-16
5- 9*	Road,	Salem, N. J. (P. & S.)	4-30
5-11*	Sewers,	Mt Kisco, N. Y. (S.)	4-30
5-11	Road,	Madison Barracks, N. Y. (S.)	4-30
5-11	Seawall,	Newport, R. I. (P. & S.)	4- 9
5-11	Culvert,	Chillicothe, Ohio (P. & S.)	5- 7
5-11*	Reservoir repairs,	Bridgeton, N. J. (S.)	5- 7
5-12	Street improvement,	Paducah, Ky. (S.)	5- 7
5-13*	Dredging,	Bridgeport, Conn. (S.)	4-16
5-13*	Dredging,	etc., Chicago, Ill. (S.)	4-16
5-16	Lighting system,	New Ft. Lyon, Colo. (S.)	4- 9
5-18	Sewer,	Cape Girardeau, Mo. (P. & S.)	5- 7
5-20*	Iron fence,	Ft. Ontario, N. Y. (P. & S.)	4- 9
5-21	Dredging,	Boston, Mass. (S.)	4-30
5-23*	Jetty,	Key West, Fla. (S.)	4-23
5-29	Gun shed,	Bremerton, Wash. (S.)	5- 7

LIST OF CONTRACTS PENDING.

LIGHT, HEAT AND POWER PLANTS.

5- 9*	Elec. equipment,	Wash., D. C. 4-23
5-11*	Light fixtures,	West Point, N. Y. 4-23
5-11	Light plant,	Folsom City, Cal. 4-30
5-11	Electrical equipment,	New York. 4-30
5-11	Alternator, etc.,	Moose Jaw, Sask. 5- 7
5-12	Lighting,	Hudson, N. Y. 4-30
5-12	Wiring, etc.,	Little Rock, Ark. 4-30
5-16	Lighting system,	New Ft. Lyon, Colo. 4- 9
5-18	Gas well,	Medicine Hat, Alta. 5- 7
5-18	Elec. equipment,	Calgary, Alta. 5- 7
5-18	Elec. equipment,	New York. 5- 7
5-20*	Conduits, etc.,	Tyler, Tex. 4-23
5-30	Power plant plans,	Oxford, Miss. 5- 7
6- 5*	Lighting fixtures,	Wilkes-Barre, Pa. 5- 7
6-10*	Conduit, etc.,	Ogden, Utah. 5- 7
6-20	Power-house, etc.,	New Orleans, La. 4-30

BRIDGES.

5- 7*	Bridge floor beams,	Bridgeport, Conn. 4-30
5- 7	Bridge work,	Logansport, Ind. 4-30
5- 7	Bridge floor,	New York, N. Y. 4-30
5- 8	Bridges,	Washington C. H., Ohio. 4-23
5- 8	Bridge,	Upper Sandusky, Ohio. 5- 7
5- 9	Bridge,	Durham, Ont. 5- 7
5- 9	Bridges,	Richmond, Ind. 5- 7
5- 9	Span,	Vale, Ore. 4-23
5-10	Bridge,	Virden, Man. 4- 9
5-10	Bridge,	Millburn, N. J. 5- 7
5-11	Bridge,	Lane, Idaho 4- 2
5-11	Bridge,	Ogden, Utah. 4-30
5-11	Culvert,	Chillicothe, Ohio. 4-30
5-12	Bridge repair,	Hamilton, Ohio. 4-30
5-12	Bridge,	Baton Rouge, La. 5- 7
5-12	Bridge,	Indianapolis, Ind. 5- 7
5-14	Bridge,	Rapidan, Va. 4-30
5-14	Bridge,	Savannah, Ga. 4-23
5-15	Bridges,	Pittsburg, Ind. 4-23
5-15	Bridge,	Lindale, Ga. 4-30
5-16	Bridge,	Berwyn, Okla. 5- 7
5-16*	Bridge,	Vancouver, B. C. 5- 7
5-18	Bridge,	Pikesville, Ky. 4-23
5-26	Retaining wall,	Waterville, Ohio. 5- 7
5-27*	Bridge,	Columbus, Ga. 4-23
5-27*	Bridge,	Chicago, Ill. 5- 7
5-28*	Bridges,	Croton Falls, N. Y. 5- 7

BUILDINGS.

5- 7	Fire engine house,	New York, N. Y. 4-30
5- 7	Armory,	Meriden, Conn. 4-23
5- 7	Ferry house,	New York, N. Y. 4-23
5- 7	Miscell. structures,	Toronto, Ont. 4-23
5- 8	Screens,	Whipple Barracks, Ariz. 4- 9
5- 8	Cathedral,	St. Louis, Mo. 4-30
5- 8*	Post-office,	Eugene, Ore. 4- 2
5- 9*	Interior work,	Wash., D. C. 4-23
5- 9	Heating,	Ogden, Utah. 5- 7
5-11	School,	Cincinnati, Ohio. 5- 7
5-11	Court-house,	Duluth, Minn. 4-23
5-11	Post-office,	Calais, Me. 4- 9
5-11	Plans,	Prince Albert, Sask. 4-30
5-11	Armory,	Seattle, Wash. 4-30
5-11	Flooring,	New York, N. Y. 4-30
5-11	Schools,	New York, N. Y. 4-30
5-12*	Assay office,	New York, N. Y. 4- 9
5-12*	House,	Nashville, Tenn. 4-16
5-12	Library,	Little Rock, Ark. 4-23
5-12	Hospital,	New York, N. Y. 5- 7
5-14*	Barrack, etc.,	Ft. Caswell, N. C. 4-23
5-14*	Barrack,	Ft. Morgan, Ala. 4-23
5-14*	Interior decoration,	Wilkes-Barre, Pa. 4- 9
5-14*	Nurses' Home, etc.,	Albany, N. Y. 4-23
5-15	Hospital (U. S. Possessions)	Porto Rico 4- 9
5-15	Ice plant (Mfg. Pl.)	Ft. Dade, Fla. 4-16
5-15	Engine houses,	Pittsburg, Pa. 5- 7
5-16	School,	Ft. Wayne, Ind. 5- 7
5-18*	Gymnasium,	Ft. Morgan, Ala. 4-23
5-18	Schools,	New York, N. Y. 5- 7
5-19	Iron floors,	New York, N. Y. 5- 7
5-20	Schools,	Miles, Wash. 4-30
5-21*	Hospital,	Buffalo, N. Y. 4- 9
5-21	Chemical bldg.,	Ann Arbor, Mich. 5- 7
5-22*	Elevators,	Wilkes-Barre, Pa. 5- 7
5-25	School,	Cleveland, Ohio. 5- 7
5-25	Quarters,	Ft. Meade, S. Dak. 5- 7
5-25*	Post-office,	Chester, S. C. 4-16
5-27*	Metal shelving,	Superior, Wis. 5- 7
5-28*	Post-office,	Houston, Tex. 4-23
5-29*	Bakery,	Ft. Andrews, Mass. (Mfg. Pl.) 5- 7
5-29	Gun shed,	Bremerton, Wash. 5- 7
5-29*	Gymnasium,	Ft. Hancock, N. J. 5- 7
5-31	Plans,	Agricultural College, Miss. 4-23
6- 1	Post-office,	Grand Island, Neb. 4-30
6- 2	Post-office,	New Ulm, Minn. 4-30
6- 2*	Educational bldg.,	Albany, N. Y. 4-23
6- 2	Plans,	Richmond, Va. 4-16
6- 3	Post-office,	Detroit, Mich. 5- 7
6- 8	Post-office,	Dover, N. H. 4-30
6-12	Post-office,	St. Charles, Mo. 5- 7
8- 1	Plans,	St. Paul, Minn. 4-30

WATER-WORKS.

5- 7	Cast-iron pipe,	Cambridge, Mass. 5- 7
5- 8	Water mains,	White Bear, Minn. 4-17
5-11	Pumping plant,	Sioux City, Iowa. 4-30
5-11*	Reservoir repair,	Bridgeton, N. J. 4-30
5-11	Pumping plant,	Santa Clara, Cal. 5- 7
5-12	Wood stave pipe,	Portland, Ore. 4-30
5-12	Water system,	Fort Smith, Ark. 4-30
5-12	Well,	Alcorn, Miss. 4-30
5-12*	Tunnel,	New York, N. Y. 4-23
5-13	Water mains,	New York, N. Y. 4-30
5-13	Cast-iron pipe,	Bryan, Ohio. 5- 7
5-13	Pump house,	Atlanta, Ga. 5- 7
5-15	Water-works,	Hildreth, Neb. 4-23
5-15	Water-works,	Fort Saint Philip, La. 4-30
5-18*	Water-works plant,	Council Bluffs, Iowa 3-16
5-18*	Reservoirs,	Monterey, N. L., Mex. 5- 7
5-18	Engine,	Guelph, Ont. 5- 7
5-19	Water system,	Augusta, Me. 5- 7
5-20*	Reservoirs, etc.,	Canon City, Colo. 4-30
5-21	Tank,	Ft. Assinniboine, Mont. 5- 7
5-22	Water-works,	Roswell, N. Mex. 5- 7
5-28*	Pumping station,	Alta Loma, Tex. 5- 7
6- 1*	Tanks,	Ft. Monroe, Va. 5- 7
6- 1	Water-works,	Shelby, N. C. 5- 7
6- 1	Drain,	Osnabruck Center, Ont. 4-16
6- 2*	Siphon,	New York, N. Y. 5- 7
6- 6*	Reservoir,	Neosho, Mo. 5- 7
6-30*	Pumps, etc.,	New Orleans, La. 4-23
7-15	Channel,	Sunnyside, Wash. 5- 7

SEWERS.

5- 8	Sewer,	Youngstown, Ohio. 4-30
5- 8	Sewers,	Dayton, Ohio. 4-30
5- 8	Sewers,	Milwaukee, Wis. 5- 7
5- 9	Sewers,	Racine, Wis. 5- 7
5-11*	Sewers,	Washington, D. C. 5- 7
5-11	Sewer pipe,	Sonora, Cal. 5- 7
5-11	Sewer repair,	New York, N. Y. 5- 7
5-11	Sewer,	Gallitzin, Pa. 5- 7
5-11*	Sewers,	Mt. Kisco, N. Y. 4-23
5-11	Sewer,	Cloquet, Minn. 4-30
5-12	Sewer,	Fort Smith, Ark. 4-30
5-15	Sewer system,	Fort Saint Philip, La. 4-30
5-15	Sewer,	Indianapolis, Ind. 4-23
5-15*	Sewers,	Huntingdon, Pa. 5- 7
5-18	Sewer,	West Lafayette, Ind. 5- 7
5-18*	Sewer system,	Cape Girardeau, Mo. 4-23
5-19	Sewer,	Trenton, N. J. 5- 7
5-21*	Sewer pipe,	Brantford, Ont. 5- 7
5-23*	Sewer,	Ardmore, Pa. 5- 7
5-26*	Sewers,	Gulfport, Miss. 4-23
6- 1	Sewers,	Saginaw, Mich. 4-30
6- 1	Sewer system,	Shelby, N. C. 5- 7

STREETS AND ROADS.

5- 7*	Macadamizing,	River Vale, N. J. 4-16
5- 7*	Paving,	Fond du Lac, Wis. 4-23
5- 7	Roads,	Brazil, Ind. 4-30
5- 7	Street improvement,	Cincinnati, Ohio 4-30
5- 7	Street improvement,	Monessen, Pa. 4-30
5- 7	Asphalt repair, etc.,	New York, N. Y. 4-30
5- 8	Street improvement,	Cincinnati, Ohio 4-30
5- 8	Grading,	Paulding, Ohio. 4-30
5- 9*	Road,	Salem, N. J. 4-23
5-11*	Macadam, etc.,	Madison Barracks, N. Y. 4-23
5-11	Curb, etc.,	Albert Lea, Minn. 4-30
5-11	Roads,	Hartford, Conn. 5- 7
5-11	Asphalt repair,	New York, N. Y. 5- 7
5-11	Grading, etc.,	Petersburg, Va. 5- 7
5-11	Repairing,	Jersey City, N. J. 5- 7
5-12	Sidewalks,	Monroe, N. Y. 5- 7
5-12	Street improvement,	Cincinnati, Ohio 5- 7
5-12	Paving,	Houston, Tex. 5- 7
5-12	Street improvement,	Paducah, Ky. 4-30
5-12*	Paving, etc.,	Dunkirk, N. Y. 4-23
5-13	Street improvement,	Cincinnati, Ohio 5- 7
5-14	Street improvement,	Cincinnati, Ohio 5- 7
5-14	Grading, etc.,	Lawrence, Kan. 5- 7
5-14	Street improvement,	Toledo, Ohio. 5- 7
5-14	Granite curbing,	Washington, D. C. 4-30
5-15	Pavement,	Petrolia, Ont. 4-30
5-15	Street improvement,	Cincinnati, Ohio 5- 7
5-15	Grading,	Spokane, Wash. 5- 7
5-15	Regulating street,	New York, N. Y. 5- 7
5-15	Grading,	Olympia, Wash. 5- 7
5-16	Gravel road,	Indianapolis, Ind. 4-23
5-18	Road improvement,	St. Paul, Minn. 5- 7
5-19*	Grading, etc.,	Salisbury, Md. 5- 7
5-19*	Grading, etc.,	Muncie, Ind. 5- 7
5-20	Grading, etc.,	New York, N. Y. 5- 7
5-26*	Pavements, etc.,	Gulfport, Miss. 4-23
5-26*	Macadam,	Elizabeth, N. J. 5- 7
6- 1*	Grading, etc.,	Ft. Andrews, Mass. 5- 7
6- 1	Roads,	Fort Slocum, N. Y. 4-23
6- 8*	Paving,	Newark, N. J. 5- 7

MISCELLANEOUS.

5- 7	Wall, piers,	Boston, Mass. 4-30
5- 7*	Dredging,	Wilmington, Del. 4- 9
5- 7*	Dredging,	Bangor, Me. 4- 9
5- 7*	Jetty,	Savannah, Ga. 4- 9
5- 7	Garbage collection (Garbage),	Cincinnati, Ohio 4-16
5- 8	Subway,	New York, N. Y. 4- 9
5- 8	Levee,	New Orleans, La. 4-23
5- 8	Wagon scales,	New York, N. Y. 4-30
5- 9*	Dock, dredging,	Chicago, Ill. 4-16
5-10	'Phone system,	Virden, Man. 4- 9
5-11	Sea wall,	Newport, R. I. 4- 9
5-11*	Reduction works,	Columbus, O. 2-20
5-11	Concrete wall,	Chicago, Ill. 5- 7
5-12	Coal-conveying apparatus,	West Point, N. Y. 5- 7
5-12	Ditch,	Redwood Falls, Minn. 5- 7
5-12	Foundation, etc.,	Wilmington, Del 4-23
5-12	Fire apparatus,	Ft. Wayne, Ind. 4-30
5-13*	Pier,	Holland, Mich. 4-16
5-13*	Dredging,	Bridgeport, Conn. 4-16
5-13*	Dredging, etc.,	Chicago, Ill. 4-16
5-14*	Wharf,	Portland, Me. 4-16
5-14	Pile dock,	Galveston, Tex. 4-30
5-14	Fire hose, engine,	Vancouver, B. C. 5- 7
5-14	Fire hose,	New York, N. Y. 5- 7
5-15	Dredging,	Ottawa, Ont. 5- 7
5-15*	Pier repairs,	Michigan City, Ind. 4-30
5-15*	Dredging,	Norfolk, Va. 4-23
5-20*	Iron fence,	Ft. Ontario, N. Y. 4- 9
5-20*	Sea wall,	Montgomery, Ala. 4-23
5-20	Root house,	Ft. Meade, S. Dak. 5- 7
5-21	Masonry wall,	New York 5- 7
5-21	Dredging,	Boston, Mass. 4-30
5-23*	Jetty,	Key West, Fla. 4-23
5-23	Steel steamer,	Wash., D. C. 5- 7
5-27*	Dredging, docks,	Chicago 5- 7
6- 1*	Dredging,	Charleston, S. C. 5- 7
6- 1*	Lock-gate house,	Boston, Mass. 5- 7
6- 1	Wharf repairs,	Newport, R. I. 5- 7
6- 1	Wharf,	Portland, Me. 5- 7
6- 1	Drain,	Osnabruck Centre, Ont. 4-23
6- 1*	Wharf,	Boston, Mass. 4-30
6- 4*	Light-house,	New London, Conn. 5- 7
6- 9	Treated lumber,	New Orleans, La. 5- 7

CIVIL SERVICE.

5- 7	Inspector Hydrants,	New York. 4- 9
5- 8	Subinspectors,	Chicago, Ill. 4-30
5- 9	Asst. C. E.,	Albany, N. Y. 4-16
5- 9	Bridge Designer,	Albany, N. Y. 4-16
5- 9	Bridge Draftsman,	Albany, N. Y. 4-16
5- 9	Health Officer,	Albany, N. Y. 4-16
5- 9	Highway Insp.,	Albany, N. Y. 4-16
5- 9	Leveler,	Albany, N. Y. 4-16
5- 9	Mech. Draftsman,	Albany, N. Y. 4-16
5-12	Inspector Light & Power,	N. Y. 4- 9
5-13	Electrician,	Columbus Barracks, Ohio 4-16

RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ABERDEEN & TOMBIGBEE.—The F. M. PETERS CONSTRUCTION CO., of St. Louis, Mo., and Aberdeen, Miss., has contract for building this railway. It will run from Okolona, Miss., to Pickensville, Ala., 65 miles, via Woodson, Aberdeen, Lackey, Old Hamilton, Kalola Springs and Columbus. H. E. Reynolds is Pres.; W. T. McKell is Engr.-in-Charge, Aberdeen.

ALTUS, ROSWELL & EL PASO.—Edward Kennedy, Pres., Altus, Okla., states that this company, recently incorporated, proposes to build from Altus, Okla., southwest to El Paso, Tex., 300 miles, via Memphis, Silverton, Plainview and Lubbock, Tex., and Roswell, N. Mex. Grading is in progress from Altus to Hollis, Okla., 34 miles. The line from Altus to Duke is completed. Surveys are being made from the Texas State line to Roswell, 100 miles. T. E. HINES, of Altus, and N. ANDERSON, of Duke, are the contractors, as noted last week. Additional contracts will be let for grading, bridges and rails. The line will run through an agricultural country. T. G. Adkins is First Vice-Pres.; Cage Beach, Second Vice-Pres.; H. E. Chapman, Secy; E. K. Stimson, Ch. Engr.; all at Altus, Okla.

ARIZONA.—H. Lee Chilson, of Winslow, Ariz., has been granted a franchise to build a railroad from Holbrook, Navajo County, to Fort Apache. A company will be incorporated to build the line.

ATLANTIC NORTHERN & SOUTHERN.—At the last meeting of the Board of Directors of the Atlantic Northern & Southern Ry. Co., held in Atlantic, Iowa, a committee, consisting of J. E. Bruce, Drace Lorenson and J. H. Simmons, was appointed to secure bids on the work of promotion, selling stock, furnishing preliminary surveys and other steps toward the extension of the road north to Manning and south to Villisca. James H. Jones is Gen. Mgr.; C. B. Judd is Ch. Engr., Atlantic.

BOLIVIA RY.—We are informed by J. G. Metcalfe, Pres., 24 Pine St., New York, that this company will have completed 127 miles of its line in June. No equipment is needed at present. A further extension of 500 miles has been surveyed. The line as proposed will extend from La Paz to Tupiza. Rankin Johnson, La Paz, Bolivia, is Ch. Engr.

CORTLAND & AUBURN.—Walter Loring Webb, Ch. Engr., 2222 Land Title Bldg., Philadelphia, Pa., advises us that this company proposes to build a steam railroad from Cortland to Auburn, N. Y., 36 miles, via Homer, Scott, Glen Haven and Owasco. Surveys have been made. B. L. Webb is Pres.; N. A. Bundy, Vice-Pres. and Gen. Mgr., Cortland, N. Y. There will be required 600,000 cu. yds. of embankment; 4,290 tons of 70-pound rails; 30 switches; 72 miles of fencing; 31 cattle guards; 102,960 ties, etc. No contracts have been let. Previously noted.

DALLAS & NEW MEXICO.—Construction on this railroad from Dallas, Tex., northwest to Jacksboro, Seymour and Lubbock, Tex., probably will begin this summer, according to Megargel & Co., bankers, 5 Nassau St., New York.

ESQUIMALT & NANAIMO (Canadian Pacific).—C. E. Cartwright, Ch. Engr., Vancouver, B. C., informs us that surveys are now in progress for the extension from French Creek to Comox, B. C., 40 miles, and that location survey has been completed for the line between Duncans and Cowichan Lake, 22 miles. The section from Wellington to Alberni, B. C., 58 miles, is under construction. J. BRIGHT, of Vancouver, has grading contract between Wellington and Nanoose. Date has not yet been determined for construction of the French Creek-Comox and Duncans-Cowichan Lake sections. Noted on Jan. 30.

GRAND TRUNK PACIFIC.—W. C. CHAMBERS, of Harriston, Ont., has been awarded a contract for building 75 miles of the Grand Trunk Pacific in the vicinity of Lake Nepigon, Ont.

MADISON SOUTHERN.—Permanent lines have been established and right-of-way secured for this proposed railway from Madison to Deadman's Bay, Fla., 90 miles. Construction will not be started until August or September, 1908, according to W. J. Kelly, Vice-Pres. and Gen. Mgr., Jacksonville, Fla.

MISSISSIPPI CENTRAL. — Construction will soon be completed on the line (Natchez & Eastern Ry.) from Brookhaven to Natchez, Miss., 66 miles. F. T. Myers is Ch. Engr., Brookhaven, Miss. The Mississippi Central R. R. now extends from Hattiesburg to Brookhaven, 83 miles. Definite plans have been made for a further extension from Hattiesburg, Miss., via Pascagoula, to Scranton, 85 miles.

NORTH DAKOTA.—Thomas D. Campbell, Pres., Grand Forks, N. Dak., states that surveys have been completed and that construction will begin May 1 on the line from Edinburg, N. Dak., to the plant of the Pembina Portland Cement Co., 21 miles. Contract was let on April 15 to FREMONT DARLING, of La Crosse, Wis., for the construction of this railway. C. H. McFarland is Ch. Engr., Grand Forks, N. Dak. Noted on April 9.

NORTH MIDLAND.—Company has obtained a two-year extension from the Provincial Legislature, the provisions calling for an expenditure of $150,000 within the next two years and the completion of the line to Stratford and north into Huron, Ont., within three years. The line from London to Stratford via St. Marys will cost $800,000. The company plans to place its bonds this year. As noted on Jan. 2 "A. E. WELCH, of London, Ont., has been awarded the contract for building the North Midland Ry. It will be 35 miles long and will connect London with Stratford. Surveys have not yet been made. Two large bridges will be built."

ORANGE & NORTHWESTERN (Frisco Lines).—This railroad, which now runs from Newton to Buna, Maurice and Orange, Tex., 61 miles, will be extended from Newton to Hemphill, Tex., 40 miles. L. Miller is Pres., Orange; B. B. Gordon is Ch. Engr., Beaumont, Tex.

PORTLAND, COLUMBUS & EASTERN.—S. H. Bracey, Pres., 1006 Tribune Bldg., Chicago, advises us that contracts will be let soon for building this railway. It will extend from Portland, Ind., to Columbus, Ohio, 124 miles. It will be an extension of the Cincinnati, Bluffton & Chicago R. R., which is now in operation from Huntington to Portland, via Bluffton, 52 miles. Noted on March 5.

SARATOGA & ENCAMPMENT.—This railroad, now under construction, will soon be in the market for rails, frogs, switches and other track material. E. A. Boardman, Roadmaster, Saratoga, Wyo.

SOUTHERN PACIFIC.—The Los Angeles "Examiner" on April 25 stated that upon the filing of a bond for $300,000 for the faithful performance of the work by the railroad company, A. A. Hubbard, Chn. of Board of Public Works, on behalf of the city, has signed the contract with the Southern Pacific Ry. for the construction of a railroad through Owens River valley for hauling material and supplies for the proposed Los Angeles aqueduct. The contract already had been signed by Vice-Pres. E. E. Calvin for the Southern Pacific. Under the contract the work of construction must begin at once, and the line from Mojave to Jawbone Canyon must be completed within 60 days. The building of the other two

sections must be carried out so that there will be no delay in handling the aqueduct freight as far as is required. From Jawbone Canyon the line extends northeast to El Paso summit, thence northwest to Owens Lake, which it skirts on the east shore to Keeler. There the road connects with the Nevada & California R. R. north to Bishop.

As noted on March 5, "J. P. Lippincott, Engr.-in-Charge of the Owens River Construction Works, which is to supply Los Angeles, Cal., with water, and Gen. Adna R. Chaffee, Pres. of the Board of Public Works of Los Angeles, have taken up the project with E. E. Calvin, Vice-Pres. and Gen. Mgr. of the Southern Pacific regarding the building of a railroad from Mojave, Cal., to Keeler, 140 miles, to transport material for building the viaduct. The city of Los Angeles voted $23,000,000 in bonds for the building of this water system, which included the transportation of material, or in other words, a railroad." Cost is estimated at $3,000,000.

SOUTHERN RY.—M. CASEY & CO., Allen Bldg., Birmingham, Ala., have been awarded contract for building a 2½-mile extension to be known as the "Cane Creek extension." This line is to serve the property of the Bessemer Coal, Iron & Land Co. at the Youngblood mines, and construction will be begun immediately. The contract involves the construction of two concrete piers and two abutments in the Cahaba River, one frame trestle, steel bridge, grading. Cost, about $80,000.

TEMISCOUATA RY.—G. G. Grundy, Supt., Riviere-du-Loup, Que., informs us that the press reports that the Trans-Continental Ry. will purchase the Temiscouata Ry., as noted on April 9, are incorrect, inasmuch as "there is no intention on the part of this company to sell, and so far as we know, no desire on the part of the Trans-Continental Ry. Co. to buy any portion of the line."

TEXAS SHORT LINE.—H. G. Shaner, Ch. Engr., Monterey, Mex., advises us that this company proposes to build a 25-mile branch line from Comfort to Fredericksburg, Tex. Contracts will be awarded at once. There will be four stations, two coaling stations, two repair shops, two round-houses, four steel water tanks, ten iron bridges and one tunnel on the line. There will be required 2,500 tons of 70-pound rails, 875 kegs spikes, 2,000 rail-joints, 400 kegs bolts, 9,000 lbs. tie plates; fastenings, frogs, crow bars, track equipment, hand cars, push cars, wheelbarrows, four passenger locomotives, four freight locomotives, eight passenger cars, 100 freight cars, turntables, water-softening plants, etc. Noted last week.

ELECTRIC RAILWAYS.

LIMA, N. Y.—The Lima-Honeoye Elec. Light & R. R. Co. probably will begin construction soon on an extension north to Rochester and south to Wayland or Atlanta, Steuben County, N. Y. Company now operates five miles of line. C. A. Watkins is Ch. Engr.

BROWNSVILLE, PA.—The Brownsville, Masontown & Smithfield St. Ry. Co. has opened offices in the First National Bank Bldg., Uniontown, Pa., where Pres. J. W. Sheldon, Secy. John Lueckert and Treas. C. S. Crawford will be located. The engineering department will also be in these offices in charge of E. C. McCullough and A. M. Hustead. Company has nearly 100 men at work now between Masontown and West Masontown and will put 100 more to work at once. These will work on the line from Masontown via Ronco, Gates, Edenborn and Lambert to Bridesport. By May 15 it is expected to have 200 men at work on the grading between Masontown and Smithfield. Noted officially in detail last week.

ONANCOCK, VA.—The Accomac Traction & Power Co. proposes to begin construction on its proposed standard-gage electric railway soon. It will be ten miles in length and will connect Onancock, Tasley, Accomac and Metomkin Bay. The officers of the company are as follows: Spencer F. Rogers, Finney, Va., Pres.; Dr. John H. Ayres, Accomac, Va., Vice-Pres.; T. W. Taylor, Onancock, Va., Secy.; John S. Maples, Onancock, Va., Treas.; James D. Lalor, 1320 Arch St., Philadelphia, Pa., Ch. Engr. Capital, $175,000. Noted on Feb. 27.

GOLDSBORO, N. C.—The Board of Aldermen has passed an ordinance granting a street railway franchise to E. T. Oliver and associates. The line is to be two miles long.

PADUCAH, KY.—The WESTERN ENGINEERING & CONSTRUCTION CO., 605 Globe Bldg., Minneapolis, Minn., has general contract, it is officially announced, for building the Kentucky & Ohio River Interurban Railroad, a line about 39 miles long, from Paducah, Ky., via Cecil, Grahamville, Ingleside, Bandana, Oscar, Hollaway and East Cairo, Ky., to Cairo, Ill. The railroad company's officers are: Pres., Charles F. Crump, Columbus, Ind.; Vice-Pres., F. N. Whitesides, Franklin, Ind.; Treas., George O. Ingram, Paducah, Ky.; Secy., L. B. Whitesides, Franklin, Ind.; Gen. Mgr., John J. Freundlich, Paducah, Ky. The directors include the foregoing and S. Lehmayer, 840 Broadway, New York City, and Charles W. Thompson, Paducah, Ky. Noted on April 16.

DEFIANCE, OHIO.—The Northwestern Ohio Elec. Ry. Co. has filed a mortgage for $1,000,000 in favor of the Security Savings Bank & Trust Co., of Toledo, to secure an issue of $1,000,000 of 5 per cent. bonds. G. G. Bloom, Stryker, Ohio, is Pres.; John Crowe, Secy., Defiance. Company proposes to build an electric railway from Defiance to Montpelier, Ohio, 34 miles, via Bryan and Evansport.

KOKOMO, IND.—We are officially advised that the Kokomo, Frankfort & Terre Haute Traction Co. proposes to build an electric line from Kokomo to Terre Haute, 104 miles, Frankfort, Crawfordsville, Rockdale, etc. Right-of-way is now being secured. From Kokomo to Frankfort the electric railway will parallel the Toledo, St. Louis & Western R. R. (steam); and from Frankfort to Rockville and Terre Haute it will parallel the Vandalia R. R. (steam). Dr. Oliver Gard, Frankfort, is Pres.; D. W. Bolen, Indianapolis, is Vice-Pres. Headquarters are at 411 State Life Bldg., Indianapolis. Noted on Feb. 27.

EVANSVILLE, IND.—Grading contracts will be let soon by the Evansville Terminal Ry. Co. As noted on March 19, this company was incorporated on March 17 to build a line from Evansville to Newburg, Ind., nine miles, to be operated both by electricity and steam. Capital stock, $200,000. Company was "incorporated to construct and operate in Indiana and elsewhere, street and interurban railroads, and plants for the distribution of electric and other heat, light and power and to deal in stocks and securities of other companies." A. F. Hayes, Evansville, Pres.; A. P. Lahr, Evansville, Vice-Pres.; James V. Rush, Evansville, Secy.; J. M. Andrews, Louisville, Ky., Treas.

MARQUETTE, MICH.—The Marquette County Gas & Electric Co. will build an extension 13 miles long, from Negaunee to Marquette. Surveys are under way. The railway is now five miles long, connecting Negaunee and Ishpeming, Mich. W. J. McCorkindale is Gen. Mgr., Ishpeming. A. L. Drum & Co., American Trust Bldg., Chicago, are Consult. Engrs.

The Marquette, Negaunee & Ishpeming Interurban Ry. Co., which will build an electric railway to connect these cities, is making active plans for beginning construction work. The line will be about 15 miles long. Capital $375,000. L. M. Sigler, Cleveland, Ohio, is Pres.; J. W. Barber, Cleveland, Secy.: The Roberts & Abbott Co., Schofield Bldg., Cleveland, Ohio, is Engr.

CHICAGO, ILL.—Announcement is made that authority has been granted to the Fidelity Trust Co. to issue $1,000,000 of 6 per cent. receiver's certificates as required to be used in completing the Chicago & Milwaukee Elec. R. R. into Milwaukee. About eight miles of track remain to be completed. The COLUMBIA CONSTRUCTION CO., of Milwaukee, has been awarded the contract and has agreed to accept the certificates in payment. As noted on Jan. 30, "receivers were appointed on Jan. 27 for the Chicago & Milwaukee Electric Railroad Co. A receiver was also named for A. C. Frost & Co., a banking firm which has financed the company's bond issues. Mr. Frost is Pres. of the railroad company. The receivers named for the railroad company are W. I. Osborne, Vice-Pres. of the Central Trust Co., Chicago; D. B. Hanna, Vice-Pres. of the Canadian Northern Railroad Co., Toronto; A. C. Frost, Pres. of the Chicago & Milwaukee Electric Railroad Co., Chicago. George M. Seward of Chicago was named as receiver for A. C. Frost & Co."

HAMILTON, IOWA.—Surveys have been made for the proposed Chicago, Ottumwa & Western Ry., which will run from Hamilton to Marysville and Dallas, Iowa, 25 miles. A. A. McGarry is Pres.; John A. Nelson, Ch. Engr., Hamilton.

SIOUX CITY, IOWA.—The City Council has adopted a resolution ordering a special election to be held on May 28, at which the voters of Sioux City will grant or reject the street franchise of the Sioux City Traction Co.

MINNEAPOLIS, MINN.—The Minneapolis, St. Paul, Rochester & Dubuque Traction Co. has awarded contract to H. A. WHITTIER, of Northfield, Minn., for the grading between Savage and Northfield, Minn., on the proposed line from Minneapolis, Minn., to Dubuque, Iowa. F. G. L. Hunt is Ch. Engr. Noted fully on April 30.

BILLINGS, MONT.—The Stillwater Power & Ry. Co. has been incorporated in Montana to build an electric railway from Billings to Cooke City, Mont., via Columbus, with branches into Yellowstone, Sweet Grass, Carbon and Park Counties. Construction probably will be started soon. Capital stock, $3,000,000. Incorporators: Willard Bennett, Helena; George H. Savage, W. E. Defressee and E. E. Congdon, Butte, Mont.

OREGON, MO.—The Oregon Interurban Ry. Co. will build a standard-gage line five miles long from Oregon, Mo., to Forest City, Mo., we are officially advised. Capital, $60,000. Survey has been made by George Custer, of Marysville, Mo., Ch. Engr. Company is not yet ready to let contracts. Benjamin F. Morgan is Pres., Lewis I. Moore, Secy.-Treas. The other directors are C. D. Zock, T. Z. Dungan, D. Zachman, W. H. Richards, W. A. S. Derr, Jacob Bucher and H. C. Cook, all of Oregon, Mo. Previously noted.

OKLAHOMA CITY, OKLA.—The Oklahoma City & Shawnee Interurban Ry. Co. and the Oklahoma & El Reno Interurban Traction Co. have been incorporated by Howard M. Hyatt, A. M. Spencer, Stephen Brown, Joseph Brown and J. A. Stevenson, all of Oklahoma City. Electric lines will be built from Oklahoma City to Shawnee and El Reno. Mr. Hyatt desires estimates on steel work, equipment, etc.

DALLAS, TEX.—The Dallas Interurban Elec. Ry. Co. will issue $1,500,000 of first-mortgage 5% 20-year bonds to provide for construction of its railway. The Dallas Interurban Elec. Ry. Co., as previously noted, has petitioned for an extension of two years in which to begin work on the construction of its proposed system of local and interurban lines. The present franchise would have expired on April 1, 1908. Under the new franchise the company must have 30 miles of track laid by December, 1910. The company was incorporated several months ago to build 30 miles of street railway in Dallas and interurban lines from Dallas to Sherman, Denison, Greenville, Terrell and Tyler, Tex. A portion of the right-of-way has been secured and preliminary surveys made. Henry Dorsey is Pres., Dallas; I. J. Willingham, First Vice-Pres.; Robert Ralston, Second Vice-Pres.; M. H. Wolfe, Third Vice-Pres.; W. W. Caruth, Treas.; S. A. Stemmons, Secy.

SEATTLE, WASH.—The Seattle, Snohomish & Everett Ry. Co. has been incorporated by C. W. Kimball, J. H. Laughlin and Clyde C. Whittenden, all of Seattle, to build an electric railway from Seattle to Bothell, Snohomish and Everett, Wash. Capital stock, $500,000. Surveys are under way.

WALLA WALLA, WASH.—The Columbia & Walla Walla Traction Co. and the Washington & Oregon Traction Co. may be merged. The Columbia & Walla Walla Co. has secured right-of-way, depot and terminal facilities for its proposed road, which is to run from Dayton, Wash., to Wallula, via Waitsburg and Walla Walla, to connect with river steamers. The Washington-Oregon Traction Co. was incorporated in Washington last fall to construct and operate railways, both steam and electric, steamboats and other transportation facilities, with headquarters at Walla Walla, Wash. About 75 miles of railway will be constructed from Walla Walla south into Oregon within the next 18 months, according to present plans. Power for the operation of the line will be secured from the Wenatchee River, 25 miles from Walla Walla. Capital stock, $1,500,000. Incorporators: Max Baumeister, E. S. Isaacs, Allen H. Reynolds, John Smith and W. A. Ritz, all of Walla Walla.

SEATTLE, WASH.—A franchise has been granted by the county commissioners to F. X. Waldron & Co., of Seattle, for the construction of an electric railway and lighting system on Vashon Island. The road will be 12½ miles long. Final surveys have been completed. Grading will be started at once. It is planned to have the line completed by June 1, 1909, the date of the opening of the Alaska-Yukon-Pacific exposition. The plans include two fast ferry boats, one running to the north end of the island from Seattle and the other to the south end from Tacoma, Wash. The power-house and electric light plant probably will be located at Lisabeula. The franchise states that the line must be started within 90 days from the date of the grant, be completed as far as Burton within two years and be entirely completed within five years. Noted on Feb. 6.

PROSSER, WASH.—The Prosser Traction Co. will begin grading soon on its proposed electric line to be built south from Prosser, with branches to Bickleton and Patterson, Wash., 40 miles. Surveys are now being made from Prosser to Bickleton, 26 miles. Company will build the first line to Belma, 9 miles west of Prosser. Contract will be let soon for a dam and a power-house. Frank O. Kelsey, of Portland, Ore., is Ch. Engr.; Frederick Finn, of Prosser, is Pres. Noted on Jan. 17, 1907.

SALEM, ORE.—The Oregon Electric Ry. Co. has increased its capital stock from $2,500,000 to $10,000,000 and has authorized the construction of 300 miles of extensions to the Portland-Salem line. Company was incorporated in May, 1906, to build from Portland to Salem, 50 miles. The proposed lines are as follows: From Portland to Tillamook, via Hillsboro; Portland to Eugene, via Corvallis; Salem to Mill City; Salem to Dallas; Salem to Albany; and Albany to Cascadia. Guy W. Talbot is Gen. Mgr., Failing Bldg., Portland. As noted on April 23, the extension of the Oregon Elec. Ry. from Salem to Albany, 27 miles, probably will be started this summer. Construction of the line between Garden Home and Hillsboro, 12 miles, is under way. The contractor is the WILLAMETTE CONSTRUCTION CO., of Portland. W. S. Barstow & Co., 50 Pine St., New York, are Engrs.

REDLANDS, CAL.—Surveys are under way for the Redlands Central Ry. between Redlands and Riverside, Cal., twelve miles. A. G. Hubbard is Pres.; John H. Fisher is Vice-Pres. and Gen. Mgr., both at Redlands.

LOS ANGELES, CAL.—The Los Angeles & Port Orient Ry. Co. proposes to build an electric railway from Hermosa Beach to Culler, Cal., seven miles, connecting with the Los Angeles Pacific Railway and the Los Angeles and Redondo Ry. and forming a through route between Los Angeles and Redondo. William H. Carlson is Pres.; J. H. Mather, Ch. Engr.

The Los Angeles & San Francisco Short Line Elec. R. R. Co., recently incorporated, has completed permanent organization. Company plans to build a line between San Francisco and Los Angeles, Cal. With a capital of $2,000,000, soon to be increased, and of which $441,000 has already been subscribed, the company announces that it will construct a direct route, already fully surveyed, which will be 400 miles long, which is 80 miles shorter than the Southern Pacific. The time is to be cut three hours. Officers have been elected as follows: Capt. John Cross, Pres. and Gen. Mgr.; Walter F. Haas, First Vice-Pres. and Chief Counsel; Charles Wier, Treas.; Charles S. Burnell, Secy; M. K. Miller, Ch. Resident Engr., all of whom, with A. P. Cross, M. H. French, W. R. Ireland and John E. Loomis, form the Board of directors; all of Los Angeles.

EDMONTON, ALTA.—At a recent meeting of the City Council it was decided that a municipal street railway is too big a venture for the city under the present financial conditions. A franchise probably will be given to a company to construct a system. Noted on March 12.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

BELLOWS FALLS, VT.—The Bellows Falls Canal Co. has decided to build a cement dam below the present dam. The preliminary work will be 570 ft. long and will contain a log spillway operated by hydraulic power with apron, which will drop about six feet. The dam will cost about $100,000 and will be completed this summer. This company also contemplates building a dam on the Lawrence mills property, situated about seven miles from this town to be used for electric power.

BERGEN, N. Y.—The Genesee County Electric Light, Power & Gas Co., of Batavia, has been granted permission by the Public Service Commission [illegible] to furnish electricity in Bergen. The [illegible]any will also supply electricity for [illegible] pumps at the water-works plant, and fo[illegible]ghting. R. M. Walker is Secy.

NEW YORK, N. Y.—B[illegible] asked until 11 a. m., May 18, by C. [illegible] Snyder, Supt. School Bldgs., Dept. of [illegible]ation, for installing electric equipmen[illegible] additions to and alterations in Public S[illegible] No. 75, and in new Public Schools N[illegible] 156 and 158, Boro. of Brooklyn.

The following bids were [illegible]ived on May 5 by C. B. J. Snyder, Su[illegible] School Bldgs., Dept. of Education, for i[illegible]ing electrical equipment in (a) Public S[illegible] No. 35 and (b) Public School No. 54; [illegible]n Hankin & Bro., 550 West 25th St., $11,487, (b) $5,243; E. Rutzler & Co., [illegible] White St., (a) $12,202, (b) $5,285; Rais[illegible] Heating Co., 1966 Broadway, (a) $10,[illegible] (b) $4,470; Frank Dobson Co., 319 E[illegible] 53d St., (a) $11,728, (b) $4,753; William [illegible]Olvaney, 177 Christopher St., (a) $12,[illegible] (b) $5,282; James Curran Mfg. Co., 51[illegible]est 36th St., (a) $10,980, (b) $5,850.

Following are the bids re[illegible]d on May 4 for installing electrical equi[illegible]t in Public School 56, Richmond Hill, [illegible] of Queens: Commercial Construction Co. [illegible]4 East 28th St., $6,415; Cowden & Deyo[illegible] 237 Broadway, $6,583; F. Frederick J[illegible]on, 592 Columbus Ave., $6,240; Peet [illegible] Powers, 43 West 35th St., $6,593; Grif[illegible] & Co., 150 Nassau St., $7,193; Reis & O'Donovan, 1123 Broadway, $6,280.

ROYER, PA.—Surveyors have been here to lay out the plans for a d[illegible] and a number of buildings which will be [illegible]structed by the Morrison's Cove Electric & Power Co., recently organized. The branch of the Juniata River which runs near Royer will be turned into the proposed dam and water power will be furnished for the making of electricity. It is the intention of the company to supply electric power to Williamsburg, Martinsburg and a number of other surrounding towns and villages. It is intended that the work on the dam and the buildings begin at an early date.

PITTSBURG, PA.—John P. Brennan, Arch., is preparing plans for a 1 and 2-story power house for the Department of Charities and Correction, Victor James P. Shaw, Supt. Estimated cost, $50,000.

FOOTDALE (New Salem post-office), PA.—The West Penn Railways Co., Connellsville, Pa., has decided to erect a rotary sub-station here, and plans and specifications have been completed. The station will replace the one now located at McClellandtown. It will be a 2-story brick building, 75 × 80 ft., and with additional equipment, will cost about $40,000. A portion of the equipment from the McClellandtown station will be moved here. It is to be completed in 60 days. The company also is considering erection of a similar sub-station at New Geneva, Pa. The erection of a car barn here is being considered also. A. C. Scheidenhelm Connellsville, Pa., is Ch. Engr. of the company.

*WILKES-BARRE, PA.—Bids are asked by James M. Norris, Controller of Luzerne County, at Wilkes-Barre, until 2 p. m. June 5, for electric lighting fixtures for the Luzerne County court-house. An appropriation of $35,000 has been made for this work. McCormick & French, Second National Bank Bldg., Wilkes-Barre, are Archs.

WASHINGTON, D. C.—Bids were received as follows on May 2 at the office of Elliott Woods, Supt. of the U. S. Capitol Building and Grounds, Washington, for furnishing a quantity of electric fans for the new House Office Building: National Electric Supply Co., 1330 New York Ave., Washington, $11.75, $8.10, $8.40; E. F. Brooks Co., Washington, $10.50; M. Du Perow, 518 Tenth St. N. W., Washington, $10.60, $10.17; Western Electric Co., New York, $10.50; H. C. Roberts Electric Supply Co., Philadelphia, $11.40; Sprague Electric Co., New York, $9.85; Manhattan Electric Supply Co., New York, $11.50; John R. Galloway, 525 Tenth St. N. W., Washington, $8; Southern Electric Co., Baltimore, Md., $11.10; W. R. Ostrander & Co., New York, $9.83.

HICKORY, N. C.—Temple & Sommer, Engrs., Land Title Bldg., Philadelphia, are making estimates for the proposed plant of the Water Power Electric Co., which, it is said, will have a capacity of 3,000 HP. M. E. Thornton is Pres.

GREENVILLE, S. C.—The Greenville & Carolina Ry. Co., T. E. Smith, Pres., will build a water-power electric plant developing about 6,000 HP. for transmission by electricity for lighting and power purposes. It is stated that arrangements will be made to begin construction soon, contract to be awarded to CAROLINA CONSTRUCTION CO., of Asheville, N. C.

JACKSONVILLE, FLA.—D. G. Zeigler & Co., of Atlanta, Ga., are considering a proposition to establish a hydro-electric plant on the Sewanee River, where 25,000 HP. can be developed at a cost of about $130,000. It is proposed to furnish electricity within a radius of 60 miles for electric railways, motors and lamps. Among the towns within this radius are Jacksonville, Fla.; Lake City, Fla.; Valdosta and Waycross, Ga.

SLOCOMB, ALA.—J. B. McCRARY & CO., Empire Bldg., Atlanta, Ga., have been awarded contract to construct the proposed municipal electric light plant, at $8,000.

UNIVERSITY, MISS.—University of Mississippi will install $35,000 electric light and power plant in connection with building improvements. Competitive plans are asked. D. M. Kimbrought is Chn. Bldg. Com., Oxford, Miss.

CANTON, MISS.—The Municipal Electric Light and Water-Works Commissioners contemplate changing the street-lighting system from 1,100 volts, 133 cycles, to 2,300 volts,

60 cycles, and probably will install two alternators of 100 and 120 KW., respectively, and Corliss engine. The commissioners have awarded contract to the WESTINGHOUSE ELECTRIC & MFG. CO., Pittsburg, Pa., for a 75-arc-lamp series alternating current system. John T. Sharp, Supt.

KNOXVILLE, TENN.—The French Broad River Power Co. has decided to order final surveys for its proposed hydro-electrical plant. It is stated the dam will be constructed of concrete, 1,850 ft. long and 35 ft. high, developing 40,000 HP. for transmission by electricity. W. J. Lester and Nyles Anderson, of Boston, Mass., and W. A. Boyce, of Asheville, N. C., are interested.

LIMA, OHIO.—The City Council has voted to issue $80,000 in bonds to erect a municipal lighting plant. It is planned to erect a plant of sufficient capacity to furnish commercial current.

LEWISBURG, OHIO.—Harry McDrag, Engr., is preparing preliminary plans for a municipal electric lighting plant to cost $28,000.

COLUMBUS, IND.—Improvements, contemplated by the Central Indiana Lighting Co. during the summer, include constructing a power plant, partially rebuilding the street car lines and extending the electric light service. The company also proposes to furnish steam heat to local consumers. New street cars will be purchased.

BEDFORD, IND.—Articles of incorporation have been filed at the office of Secretary of State at Indianapolis, for the Bedford Power Co. The capital stock is now designated as $50,000, but it will be increased soon to $400,000. Among the incorporators are Harry S. New, H. A. Mansfield, John W. Holtzman and James B. Nelson, Gen. Mgr. of the Merchants' Heat & Light Co., all of Indianapolis. The company plans to dam the east branch of White River near Williams, Ind., in Lawrence County, and to erect a power plant for the generation of electricity, which will be carried ten miles by wire for use at the plant of the Bedford Cement Co. and at the Bedford quarries.

NOBLESVILLE, IND.—We are officially advised that the hydro-electric power development on the White River will be completed this year. Plans and specifications are being prepared by H. von Schon, Consult. Engr., Wayne County Bank Bldg., Detroit, Mich. The works required will consist of a spillway 300 ft. long and 20 ft. high; of reservoir banks 15 ft. high and 250 ft. long, and of a system of waste gates. The power station was built some years ago. The power equipment will be for an output of 600 KW. The current is to be transmitted to Noblesville, two miles distant from the power site.

FLINT, MICH.—The Oak Park Power Co. is planning additions to its plant which will involve the expenditure of $60,000. An addition 50 × 50 ft. to the plant and a 40-ft. addition to the boiler room, a 1,000-KW. generator, three 300-HP. boilers, a cross compound Corliss engine, a new air compressor with a capacity of 960 cu. ft. per minute are included in the improvements. The plant furnishes power for the Buick Motor Co. and the Weston Mott Co.

PLAINWELL, MICH.—About $50,000 will be expended by the Commonwealth Power Co. constructing a dam, a mile below Plainwell.

WATERTOWN, WIS.—Plans are being prepared by the Milwaukee Light, Heat & Traction Co., controlled by the Milwaukee Electric Railway & Light Co., for construction of a power-house at Watertown to furnish electricity to operate the electric railway now under construction from this city to Oconomowoc. The company has decided to make improvements to the Rough and Ready Dam also, which will include raising the dam, erecting a new building and installing new machinery. John I. Beggs is Pres. and Gen. Mgr., M. E. Ry. & Lt. Co.

ATLANTIC, IOWA.—Bids will be received about May 15 for reconstructing the municipal electric light plant and water-works system at a cost of about $50,000. J. L. Darnell, Nelson Bldg., Kansas City., Mo., is Engr.

MONTICELLO, MINN.—The Mississippi River & Electric Power Co. has secured permission from the War Department, Washington, D. C., to construct two dams, one at Monticello, and one near Clearwater, and under its charter, it is authorized to transmit power to nearby towns and cities, and to construct, own and equip electric railway lines. The company owns right-of-way from Monticello to the southern limits of the city of St. Cloud, on both sides of the Mississippi.

BEULAH, WYO.—The Redwater Power Co., of Spearfish, S. Dak., in which Henry Keets is interested, has secured water rights and right-of-way on Sand Creek, above the town of Beulah, Wyo., for an electrical power plant developing 1,200 HP. A portion of the surveys have been made, and it is expected excavating and construction work will be commenced within the next 30 days. A quantity of tunnel and flume work is included in the project.

TOWNSEND, MONT.—We are officially advised that the Deep Creek Improvement Co. is about to build a 600-HP. electric plant on Deep Creek, to cost about $85,000. Power will be used for lighting Townsend and for operating the mines. N. S. Poole is Pres.

FARMINGTON, MO.—A contract let April 17 by the city of Farmington for the construction of a municipal electric light plant was secured by the COMMERCIAL ELECTRICAL SUPPLY CO., 15th and Pine Sts., St. Louis, Mo., the price for the plant complete being $23,120. Thomas B. Carter is the Engr.-in-Charge.

WAURIKA, OKLA.—We are officially advised that plans are being prepared and bids will be asked in about 30 days for an electric lighting plant to cost $15,000. The system will consist of 50 arc lamps of 2,000 c.-p. and 4,000 incandescent lamps of 16 c.-p., and will be operated by steam. The O'Neil Engineering Co., Wilson Bldg., Dallas, Tex., is Engr.

CANON CITY, COLO.—Plans are being considered by the Northern Electric Co., of Madison, Wis., for construction of an electric plant at the Canon City coal fields to furnish electricity for railway purposes, irrigation, etc. A. B. Hulit is interested in the enterprise.

SEATTLE, WASH.—The Seattle-Tacoma Power Co. has obtained a permit to erect a 2-story brick power station at 1319 Western Ave. It will adjoin the transformer house of the same company and machinery will be installed to generate 1,500 HP. Facilities are provided for doubling the capacity when desired by the installation of a duplicate of the new plant. Excavations have been made, piles driven, and the concrete is now being poured into the wall frames. N. H. Latimer is Pres., Seattle.

ASHLAND, ORE.—We are officially advised that bids will be received in about 30 days for a power plant to cost $150,000 and capable of supplying power for 15,000 lights. It will be located in the Brewster Valley. All surveys have been made and plans have been made for flume, pipe-line and power-house. The dam site has been secured, also site for a 35-acre reservoir, to be 30 ft. deep. About 600 acres will be flooded with twelve feet of water. All right-of-way has been secured. There will be 35 miles of pipe-line. C. E. Smith is in charge; J. S. N. Smith is Consult. Engr.; E. N. Kelley, Portland, Ore., is Des. Engr.; J. R. Benson is owner.

CHICO, CAL.—The Midas Gold Mining Co., of Shasta, Cal., will expend between $40,000 and $50,000 in the erection of a power plant on Bee Gum Creek to furnish power for the mine. J. W. Roper and L. A. McIntosh have filed a notice of appropriation of 5,000 in. of water in Bee Gum Creek.

BIG OAK FLAT, CAL.—The North Mountain Power Co., which was recently merged with the Eureka Lighting Co., is planning to build a power plant at Big Oak Flat, on Trinity River, about 15 miles from Junction City, and will develop 4,000 HP., for which surveys have been made and plans drawn. It is proposed to utilize the water of Cut Throat Gulch. A dam will be thrown across the gulch, making a large storage reservoir. The transmission line from Eureka to Junction City is 80 miles in length.

*OGDEN, UTAH.—Bids are asked until 3 p. m., June 10, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for installing a conduit and electric wiring system in the extension to the U. S. post-office and court-house building at Ogden.

MOOSE JAW, SASK.—Bids are asked until May 11, by John D. Simpson, City Clerk, for a 500-KW. turbo-alternator, etc., for the city.

MEDICINE HAT, ALTA.—Bids are asked until May 18, by W. P. Morrison, City Engr., for drilling an 8-in. gas well to a depth of 1,100 ft.

EDMONTON, ALTA.—CANNELL & SPENCER have been awarded the contract for the construction of the power-house to be built in connection with the General Hospital, at $40,000. R. P. Barnes is Arch.

CALGARY, ALTA.—Bids are asked until May 15 by the City Clerk for installing the following units at the city electrical generating station: 1,000-HP. reciprocating engine; 750-KW. 3-phase, 60-cycle, alternating current generator; one direct connected steam driven excitor set, direct current, 120 volts, 30-KW.; one "Tirrill" automatic voltage regulator; switchboard of two panels; one station watt meter (daily recorder). Alternate scheme: One 750-KW. turbo-generator, complete in all details. V. Hill is Engr., Calgary.

FORT STEELE, B. C.—Press reports state that the Bull River Power & Light Co. will develop 10,000 HP. on Bull River, near Fort Steele. A grade more than 3,000 yds. in length has been completed to accommodate a flume 16 × 8 ft. on the inside. A gravitation dam seven feet high, with an inclination of 23 degrees from the perpendicular, is about to be installed at the intake and will rest on rock foundation from bank to bank. This work will be done about 1½ miles above the falls and the point where the Kootenai Central Ry. will cross the river. The power-house will be erected a short distance below the railway crossing and will be equipped with an outfit of percussion water wheels operating under a vertical head of over 275 ft. George E. Henderson, of Merrillan, Wis., is Mgr.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids for the construction of the roadway pavement and inside trolley tracks of the Blackwell's Island Bridge over the East River between Manhattan and Queens Boroughs were opened on April 16 by J. W. Stevenson, Comr. of Bridges. The contract was awarded to the MARYLAND STEEL CO., 71 Broadway, New York, at $182,970. List of bidders noted last week.

The following bids were opened on April 23 by James W. Stevenson, Comr. of Bridges, for constructing the footwalk flooring of the Blackwell's Island bridge over the East River, between the boroughs of Manhattan and Queens: J. H. Gray Co., Broadway and 23d St., $66,000; FICKLIN, BAKER & CO., 1 Madison Ave., $64,600 (awarded contract); North Eastern Construction Co., 225 Fourth Ave., $75,890; McHarg-Barton Co., 299 Broadway, $71,640.

Due to withdrawal of contract, no bids were opened on April 23 by James W. Stevenson, Comr. of Bridges, for completing abandoned contract for the construction of the Madison Ave. temporary bridge over the Harlem River.

*CROTON FALLS, N. Y.—Bids are asked until May 29, by George I. Ruscoe, Chn. Com. on Roads and Bridges, for constructing two highway bridges at Croton Falls and for repairing bridge near Ossining. Eberhard J. Wulff is County Engr., National Bank Bldg., Tarrytown, N. Y.

TRENTON, N. J.—The Legislature has authorized the Freeholders of Hudson County to rebuild the bridge over the Hackensack River.

MILBURN, N. J.—Bids are asked until May 10 by G. F. Drum, County Engr., Newark, N. J., for constructing a concrete arch bridge on Glen Ave., Milburn.

ERIE, PA.—The Council has passed the Barber ordinance, authorizing a bond issue of $10,000 for constructing concrete arch culverts over Mill Creek at Second and Third Sts.

*PHILADELPHIA, PA.—The following contracts for the construction of bridges were awarded on April 22 by George R. Stearns, Dir. Pub. Wks.: Bridge on the line of Sedgewick Ave., over the Reading Ry.; estimated cost, $35,000, THOMAS F. REILLY, 918 Harrison Bldg., Philadelphia, $26,561, six months; bridge on the line of Ontario St., under the Richmond branch of the Reading Ry., estimated cost, $40,000, THOMAS F. REILLY, $33,714, six months; bridge over Hunting Park Ave., on the Philadelphia & Newton & New York branch of the Reading Ry., estimated cost, $40,000, THOMAS F. REILLY, $37,545, six months; bridge on Rockland St. over the North Pennsylvania R. R., estimated cost $40,000, McGAW & GRAY, Pennsylvania Bldg., Philadelphia, $23,400, six months; bridge on 29th St., over the Pennsylvania R. R., estimated cost $74,000, FILBERT PAVING & CONSTRUCTION CO., Pennsylvania Bldg., Philadelphia, $32,159, eight months. The bids for constructing six piers for the Passyunk Ave. bridge have not been examined by the Director as yet, but the contract will be awarded next week. Complete list of bidders noted last week.

EMMITSBURG, MD.—The Frederick and Carroll County Commissioners have awarded the contract to the YORK BRIDGE CO., York, Pa., for constructing an iron bridge across the Monocacy River, cost, $6,000.

WASHINGTON, D. C.—The Chief of the Corps of Engineers has approved the plans of the Engineer in charge of the improvement of the Potomac River, for constructing a reinforced concrete bridge across the inlet to the tidal reservoir. Estimated cost, $105,000.

BATON ROUGE, LA.—Bids are asked by the Police Jury of East Baton Rouge, Baton Rouge, until 10 a. m., May 12, for the construction of a wooden bridge across the Cornite River. F. A. Woods is Secy.

NEW ORLEANS, LA.—The only bid received on April 27 by the city for repairing the Bayou St. John bridge at Esplanade Ave. was that of the Penn Bridge Co., Beaver Falls, Pa., at $29,400.

MARIETTA, OHIO.—The Washington County Commissioners have decided to have bridges constructed in Cutler, Decatur and Belpre Townships during the summer. Arthur F. Cole is County Surv.

CHILLICOTHE, OHIO.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a concrete arch culvert in Springfield Township. Bids are asked until May 11.

UPPER SANDUSKY, OHIO.—Bids are asked until May 8 by J. N. Troxier, County Audr., for constructing a bridge over the Sandusky River.

POINT PLEASANT, OHIO.—THE MOUNT VERNON BRIDGE CO. was awarded the contract on April 24 by the Kanawha & Michigan Ry. Co. for the construction of four spans of the company's bridge across the Ohio River here, at about $200,000. T. R. Scanlan is Insp. B. & B., Lancaster, Ohio.

WATERVILLE, OHIO.—Bids are asked by the County Commissioners of Wood and Lucas Counties, Bowling Green, Ohio, until 10 a. m., May 26, for the construction of a reinforced concrete retaining wall on the south side of the easterly approach to the joint bridge at Waterville. D. T. Davies is County Audr., Lucas County.

INDIANAPOLIS, IND.—Bids are asked until 10 a. m., May 12, by the County Auditor for constructing a bridge over a branch of Lick Creek.

RICHMOND, IND.—Bids are asked until 11 a. m., May 9, by the County Auditor for constructing and repairing bridges and retaining wall.

WATERFORD, IND.—The LA FAYETTE BRIDGE CO., La Fayette, Ind., has been awarded the contract for constructing a reinforced concrete bridge over Trail Creek, Waterford, for the Chicago, South Bend & Northern Indiana Ry. Co. William Cummins is Ch. Engr., So. Bend, Ind.

*CHICAGO, ILL.—Bids are asked by the Board of Trustees of the Sanitary District for the equipment of the 8-track bridge at Campbell Ave. until noon, May 27. The bridge consists of four parallel-double-track-through-arch spans of two leaves each, which are so constructed that by the addition of said equipment consisting of track girders, segmental girders, counterweight, machinery and other necessary work, the bridge may be operated as a rolling lift bridge of the Scherzer type. I. J. Bryan is Clk. Bd.

ST. PAUL, MINN.—The Board of Park Commissioners have awarded the contract for a reinforced concrete bridge to be built along the Mississippi River boulevard here to F. J. ROMER & SON, 200 Ramsey St., St. Paul, at $18,615. George T. Redington is Secy. Bd.

NASHVILLE, ARK.—THE KANSAS CITY BRIDGE CO., Kansas City, Mo., has been awarded the contract for constructing a 400-ft. steel bridge over Little River for the Memphis, Paris & Gulf R. R. Co.

SAN ANTONIO, TEX.—The lowest bid submitted to the city for the construction of a bridge on Houston St. to replace the present structure across the San Antonio River was that of the Missouri Bridge & Iron Co., at $8,147. J. E. Van Riper is Asst. City Engr.

BERWYN, OKLA.—Bids are asked until May 16 by Carter County for the construction of a steel bridge across the Washita River three miles from here. William B. Frame is County Clk., Ardmore, Okla.

SEATTLE, WASH.—The AMERICAN PILE DRIVING CO., of Everett, Wash., was awarded the contract on April 25 for constructing the trestle, 3½ miles long, from the King St. passenger station to South Seattle, which will be used jointly by the Union Pacific, the Great Northern and the Northern Pacific railroad companies. There will be four tracks.

ESTACADA, ORE.—The County Court has awarded to OLDS & REED the contract for the construction of the bridge across the Clackamas River here at $5,800.

SPRINGFIELD, ORE.—L. N. RONEY has been awarded the contract by the Portland, Eugene & Eastern Ry. Co. for constructing the trestle work for the Eugene-Springfield trolley line along the bottoms from Judson's Point east to the Willamette River at Springfield. There will be about 4,000 ft. of trestle work, requiring over 400,000 ft. of lumber and 1,000 piles.

FRESNO, CAL.—The PACIFIC CONSTRUCTION CO. was awarded the contract on April 18 by the Board of Supervisors for constructing the Laton bridge across the kings River at $8,900. Scott McKay is County Surv.

EUREKA, CAL.—Bids have been received by the Board of Supervisors for the construction of a steel highway bridge across Salt River at Arlyanda, as follows: F. H. Green and Bert Moore, $12,800; Frank Smith, $9,550; Wm. G. Mohn, $10,268; San Francisco Bridge Co., $10,487; Mervy-Elwell Co., $9,375; Mercer Fraser Co., $9,999; PACIFIC CONSTRUCTION CO., $9,367 (awarded contract).

LOS ANGELES, CAL.—Plans and specifications for the construction of the following bridges have been adopted by the Board of Supervisors: A 100-ft. trestle over the Los Angeles River at State St.; a 225-ft. bridge over the San Gabriel River at Center St.; a 175-ft. bridge over the same river at Norwalk, and a 350-ft. bridge over the San Gabriel River between Eliftman Station and Long Beach.

UPPER WOODSTOCK, N. B.—POWERS & BREWER, of Woodstock have been awarded the contract for the concrete work on the bridges at Upper Woodstock, by the Canadian Pacific Ry. Co.

DURHAM, ONT.—Bids are asked by W. Calder, Esq., Mayor, until May 9, for the construction of a reinforced concrete arch bridge, 42-ft. span, with retaining wall approaches. Bowman & Connor, 30 Toronto St., Toronto, and Berlin, Ont., are Engrs.-in-Charge.

WINNIPEG, MAN.—A combined railroad and traffic bridge will be constructed across the river here for the Grand Trunk Pacific Ry. Co. at an estimated cost of $800,000. O. O. Winter, Winnipeg, is Gen. Supt.

*VANCOUVER, B. C.—The date for receiving bids for the constructing of the bridge over False Creek has been extended to May 16. Bids were asked until May 1.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BAR HARBOR, ME.—Bids were received as follows May 4 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Bar Harbor, Me.: A. E. Lawrence Co., Bar Harbor, Me., $59,824, Sept. 1, 1909; Otto Nelson, Bangor, Me., $57,033, Sept. 1, 1909; W. H. Fissell & Co., New York, $55,973, Nov. 1, 1909; Woodberry & Leighton Co., 166 Devonshire St., Boston, Mass., $59,783, Nov. 1, 1909.

MIDDLETOWN, CONN.—The Trustees of the Connecticut Hospital for the Insane have decided to erect two brick fireproof buildings for the accommodation of patients.

NEW YORK, N. Y.—Bids are asked until 2.30 p. m., May 12, by Robert W. Hebberd, Comr. of Public Charities, for (a) tearing down and removal, excavation and masonry, steel and iron, roofing and metal work, carpentry, glazing, painting, hardware, and all other work (except electric, heating and plumbing work, gas and electric fixtures and fitting up); (b) electrical conduit, electric wiring and switchboard work, heating work, plumbing work, gas piping and all other work (except tearing down and removal, excavation and masonry, steel and iron, roofing and metal work, carpentry, gas and electric fixtures and fitting up); (c) for the gas and electric fixtures and fitting up, and all other work (except tearing down and removal, excavation and masonry, steel and iron roofing and metal work, carpentry, and electric, heating and plumbing work) for the erection and entire completion of a day room for male inmates in connection with the Home for the Aged and Infirm, Blackwell's Island, the City of New York.

We are officially advised that the ENGINEERING & CONCRETE CONSTRUCTION CO., 1 Madison Ave., New York, has been awarded the contract for the erection of the six reinforced concrete buildings for the Sea View Hospital in New York City Farm Colony, Staten Island.

Plans have been changed for the building to be erected at 142 Perry St., for Fleischman & Co., 701 Washington St. The present plans provide for a stable instead of a loft building, as first planned. Arthur M. Duncan, 15 William St., is Arch.

NEW YORK, N. Y.—Plans have been filed with the Building Superintendent for the proposed building of the Emigrant Industrial Savings Bank, to be erected at 43 to 51 Chambers St., running through to Reade St. It is to be a 14-story structure of modern renaissance type. The main facade on

Chambers St. will be of granite at the lower stories and limestone above, and on Reade St. the front will be limestone at the first story and ornamental brick above. The basement will be fitted with a gymnasium, a bowling alley and sitting room for the bank employees. The building is to cost $1,500,000.

NEW YORK, N. Y.—We are officially advised that estimates are being taken by the One Hundred and One Fifth Ave. Co., 101 West 42d St., owner, for constructing an 11-story brick building, 59 × 90 ft. Mulliken & Moeller, 7 West 38th St., are Archs.

Harry T. Howell, Arch., 534 Willis Ave., advises us that estimates will be taken in about ten days for three 5-story brick tenements to be built on Fulton Ave., 80 ft. north of Wendover Ave., the Bronx. Two buildings will measure 41.8 × 88 ft. and one building will be 41.8 × 94 ft. Jerry Altieri, 1567 Wilkins Ave., is owner. Cost, $120,000.

NEW YORK, N. Y.—We are advised by John Hauser, Arch., 360 West 125th St., that Isaac M. Berinstein, 232 Broadway, will take estimates at once for a building he will construct at 146th St., near Broadway. The building will have five stories, 50 × 87.11 ft., and will cost $120,000.

B. & J. P. Walther, Archs., 147 East 125th St., New York, advise us that estimates will be taken at once for two 5-story brick and stone warehouses and stable, 126 × 100 ft. and 25 × 100.11 ft., to be built at Third Ave. and 121st St. for Edward Callan, 119 West 120th St. Estimated cost, $120,000.

McKim, Mead & White, Archs., 160 Fifth Ave., advise us that JACOB ZIMMERMAN, Broadway and 36th St., has contract to build a 10-story brick and stone office and loft building, 25 × 93.3 ft., at 36 West 15th St., for Edward F. Caldwell, 38 West 15th St.

NEW YORK, N. Y.—Bids are asked until 3 p. m., May 19, by John W. Brannan, Pres. Bd. of Trustees, Bellevue and Allied Hospitals, for laying c.-i. floors on the balconies of Harlem Hospital.

Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 11 a. m., May 18, for general construction, etc., of new Public School No. 160, on the southerly side of Fort Hamilton Ave., between 51st and 52d Sts., Boro. of Brooklyn; for installing heating and ventilating apparatus for additions to and alterations in Public School No. 4, on Rivington, Pitt and Eldridge Sts., Boro. of Manhattan; for alterations, repairs, etc., for Public Schools Nos. 10, 43, 46, 54, 93, 157, 165, 166, 169, 170, 179, 184, 186, Wadleigh High School, Boro. of Manhattan; for alterations, repairs, etc., for Public School No. 35, at 160 Chrystie St., Boro. of Manhattan; for alterations, repairs, etc., for Public School No. 41, at 36 Greenwich Ave., Boro. of Manhattan; for new fireproof main stairs at Public School No. 88, on Rivington and Lewis Sts., Boro. of Manhattan; for the general construction, etc., of new Public School No. 101, on the north side of East 111th St., about 43 ft. west of Lexington Ave., Boro. of Manhattan.

HUNTINGTON, L. I., N. Y.—Adden & Parker, Archs., 12 Bosworth St., Boston, Mass., are preparing plans for a 3-story combined grammar and high school building for the Board of Education. Geo. C. Henrickson, Chn. Bldg. Com., Huntington. Cost, $80,000.

*FORT HANCOCK (Sandy Hook post-office), N. J.—Bids are asked by Capt. M. N. Falls, Constr. Q. M., until 2 p. m., May 29, for construction, plumbing, heating, electric wiring and fixtures of gymnasium and bowling alley at this post.

ELIZABETH, N. J.—Clyde S. Adams, 1202 Locust St., Philadelphia, Pa., has been selected by A. P. Hughes, Secy. Bd. of Education, to prepare plans for School No. 3. Cost, $100,000.

*WILKES-BARRE, PA.—Bids are asked by James N. Norris, County Controller, at Wilkes-Barre, until 2 p. m., May 22, for installation of two passenger elevators of the hydraulic plunger type in the Luzerne County court-house.

PITTSBURG, PA.—Bids are asked until 10.30 a. m., May 15, by Edward G. Lang, Dir. Dept. Public Safety, for the erection of an engine house in the 39th Ward, at Lorenz Ave. and Steuben St.; the erection of an engine house of the Bureau of Fire in the 19th Ward, on Rebecca St., Pittsburg; the erection of an engine house of the Bureau of Fire, in the 21st Ward, on Lemington Ave. and Missouri St.; for alterations, repairs and improvements at the engine house of the Bureau of Fire on Eighth St., between Penn Ave. and Duquesne Way. George W. Guthrie is Mayor.

CONNELLSVILLE, PA.—The Directors of the Second National Bank of Connellsville have awarded a contract for the construction of the proposed 8-story bank building to the A. & S. WILSON CO., 541 Third Ave., Pittsburg. His bid was the lowest, $117,500. It will be of steel, brick and stone structure on Pittsburg St.

BALTIMORE, MD.—We are officially advised that on May 1 the contract for furnishing and erecting steel work in reconstruction of the Masonic Temple in this city was awarded to the BALTIMORE BRIDGE CO., Bush St., Baltimore, Md. The amount of steel work involved, 620 tons.

*FORT MONROE, VA.—Bids were received on April 30, by Capt. Ernest R. Tilton, Constr. Q. M., for construction of one Officers' Artillery School and one Enlisted Men's School building, including plumbing, heating, electric wiring and fixtures, and electric elevator. We are officially advised that the lowest bidder was the George A. Fuller Construction Co., Munsey Bldg., Washington, D. C., at $180,520 for complete work.

ALEXANDRIA, LA.—Plans are being prepared by E. J. Hull, of Alexandria, for a city hall building, which will be semi-fireproof, 80 × 80 ft., and will cost $75,000. O. N. B. Sirmer is Mayor.

CINCINNATI, OHIO.—Bids are asked by the Clerk of the Board of Education, City Hall, until noon, May 11, for construction and erection of a public school building on Eastern Ave. and Lewis St., Cincinnati. Dr. J. M. Withrow is Chn. Bldg. Com.; Tietig & Lee, Commercial Tribune Bldg., Cincinnati, are Archs.

It is reported that an apartment building, costing about $200,000, will be erected by the W. F. Doepke Estate. Plans are being prepared by S. S. Godley, Neave Bldg.

TOLEDO, OHIO.—It is stated that bids will be called for at once for the proposed post-office building to be erected here at a cost of $500,000. James Knox Taylor is Superv. Arch., Treasury Dept., Washington, D. C.

CLEVELAND, OHIO.—Bids are asked at the office of the Clerk of the Board of Education, East Eighth St., Cleveland, until noon, May 25, to complete the school building on the property owned by the Board of Education on Orange Ave., S. E., between East 30th and East 31st Sts., and to be known as Mayflower School. Charles Orr is Dir. of Schools.

FORT WAYNE, IND.—Bids are asked until 2 p. m., May 16, by the Trustees of Springfield Township, at the office of Griffith & Fair, Archs., Bass Block, Fort Wayne, for construction of a school house.

MADISON, IND.—The Trustees of the South Eastern Indiana Hospital for the Insane have awarded a contract to PULSE & PORTER, of Greensburg, Ind., for finishing the buildings near Madison, at $858,000. The contractors will sublet the plumbing, sewer work and the placing of the electric plant and the mechanical equipment in the building. Noted on April 16.

INDIANAPOLIS, IND.—Trustees of the Y. M. C. A. have awarded a contract to the BEDFORD STONE & CONSTRUCTION CO. and the NOELKE-RICHARDS IRON WORKS CO. for the construction of a building, at $210,478. Bids will be received for the plumbing, heating, power plant and wiring.

GRAND RAPIDS, MICH.—WELLS BROS. CO., Monadnock Bldg., Chicago, Ill., have secured contract, at $428,542, for construction of U. S. post-office and court-house building in this city. Noted on April 16.

DETROIT, MICH.—On April 27 the Board of Estimates allowed the following appropriations: For Ferry School, $75,000; Bishop School, $65,000; Eastern High School addition, $100,000; to complete Central High School, $10,000; North Woodward School, $75,000; addition to Amos School, $25,000. William J. Lee is Secy. Bd. of Education, 50 Broadway, Detroit; Malcomson, Higginbotham & Clement, Archs., Moffat Bldg.

Bids are asked until 3 p. m., June 3, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for constructing an extension to and remodeling, etc. (except elevators), the U. S. post-office and court-house at Detroit.

ANN ARBOR, MICH.—Bids are asked by James H. Wade, Secy. Bd. of Regents of the University of Michigan, until noon, May 21, for the erection of a chemical laboratory building. Smith, Hinchman & Grylls are Archs. and Engrs., 710 Washington Arcade, Detroit.

CHICAGO, ILL.—The Crucible Steel Co. of America, 64-66 Clinton St., between Madison and Washington Sts., will build a steel construction warehouse on land which it has acquired at 117 West Washington St., between Union and Desplaines Sts. It fronts 60 ft. with a depth of 151 ft., extending back to Waldo Pl. The company will cover the entire lot with a 6-story building which is expected to cost between $75,000 and $100,000.

The contract for constructing a 12-story reinforced-concrete building, 60 × 100 ft., for M. Born, at 342 Fifth Ave., has been awarded to the ALLING CONSTRUCTION CO., 72 Madison St., Chicago. The company is in the market for 3,000 bbls. of cement, sand, gravel, reinforcing steel, plumbing, electric wiring, steam heating, glazing, painting, elevators, fireproof windows, sheet metal, sprinkler system, ornamental and miscellaneous iron work, etc.

CHICAGO, ILL.—Worthmann & Steinbach, Archs., 625 West Chicago Ave., are preparing plans for a bank, office and hall building for the Chicago City Bank, 6225 South Halsted St. Cost, $125,000.

RHINELANDER, WIS.—The city of Rhinelander has had plans prepared for a 2-story and basement city hall, 54 × 86 ft. It will be constructed of press brick and cut stone and will cost $80,000.

MILWAUKEE, WIS.—Ferry & Clas, Archs., 419 Broadway, Milwaukee, for the $250,000 addition to the Milwaukee Public Library, have announced that the plans will be ready for bids about June 1.

*SUPERIOR, WIS.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., May 27, for metal vault shelving for the U. S. post-office, court-house and custom-house, Superior.

STILLWATER, MINN.—The State Board of Control, P. M. Ringdahl, Chn., St. Paul, Minn., has awarded the contract for a manufacturing building, warehouse, dormitory, power plant and water tower for the State Prison here to J. & W. A. ELLIOT & CO., 906 Lumber Exchange Bldg., Minneapolis. The contract price is $148,680. C. H. Johnston, Manhattan Bldg., St. Paul, is Arch.

MINNEAPOLIS, MINN.—Frederick L. Jones, University of Minnesota, Minneapolis, advises us that plans are being formed for laying out a campus, after which a building will be considered. Cyrus Northrup is Pres.

ST. PAUL, MINN.—Macalester College, St. Paul, T. M. Hodgman, Pres., will erect a building containing science hall, laboratory and gymnasium on the college grounds this year. It will be three stories high, of pressed brick and cut stone construction, fireproof, having steam heating and electric lighting. Cost, $60,000.

ST. PAUL, MINN.—Bids were received as follows May 5 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a tower for the post-office building at St. Paul, Minn.: W. W. Bowe, St. Paul, $123,395; Butler Bros., 379 Sibley St., St. Paul, $130,000; W. J. Hoy, St. Paul, $138,890; P. M. Hennessey Construction Co., New York Life Bldg., St. Paul, $127,400. Dec. 31, 1909.

FORT LEAVENWORTH, KAN.—The contract for grading the site for the five new sets of officers' quarters at Fort Leavenworth has been let to M. A. WOGAN, of Otaka, Okla. Work will commence at once. The two Majors' and three Captains' sets, each to accommodate two officers, will be strictly modern and will cost, complete, $125,000.

FORT MEADE, S. DAK.—Bids are asked until 10 a. m., May 25, by Capt. L. C. Scherer, Constr. Q. M., Fort Meade, for constructing one set of Commanding Officers' quarters, one double set of Lieutenants' quarters, one set of Bachelor Officers' quarters, one band barrack, and one administration building, and for installing plumbing, steam heating, electric wiring and electric lighting fixtures in buildings specified.

ST. CHARLES, MO.—Bids are asked until 3 p. m., June 12, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for complete construction of U. S. post-office at St. Charles.

KANSAS CITY, MO.—Sisters of St. Joseph, in charge of St. Teresa's Academy, are having plans prepared by Wilder & Wight, First National Bank Bldg., Kansas City, for a school to cost about $300,000.

ST. LOUIS, MO.—Plans are being prepared by A. B. Graves, Arch., 314 North Fourth St., St. Louis, for a hospital building to be erected by the Board of Public Improvements. A. J. O'Reilly, Pres. Cost, $400,000.

Milligan & Wray, Archs., 721 Oliver St., have about completed plans for two 5-story wings and an addition to the insane asylum for the Board of Public Improvements. A. J. O'Reilly, Pres. They will cost $600,000 and $75,000, respectively.

LITTLE ROCK, ARK.—The Southern Construction Co. has had plans prepared for hotel to have ten stories, 50 × 140 ft. Contract has been let to CALDWELL & DRAKE, Columbus, Ind. Cost, $300,000. Oscar Davis, of Little Rock, is interested.

TACOMA, WASH.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office building at Tacoma, Wash., to W. H. MAXWELL, Spokane, Wash., $423,251. Time, Nov. 1, 1910. Noted on April 16.

TACOMA, WASH.—Bids were received on April 27 for erecting a clinker brick and steel armory at Tenth and Eleventh Sts. Russell & Babcock, Provident Bldg., Tacoma, are Archs. The building will have two stories and basement, 120 × 300 ft., and will cost $95,000. Contracts were awarded as follows: General contract, JOSEPH WELLS, Tacoma; heating, WALL & FERGUSON, Tacoma; wiring, MECHAM & BABCOCK, Seattle; plumbing, A. GEHRI, Tacoma.

BREMERTON, WASH.—Bids are asked until 11 a. m., May 29, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for a 1-story steel frame gun shed at the U. S. Navy Yard, Bremerton. Specifications are on file at the office of Engineering News, New York.

The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded contract for the construction of three hospital buildings and connecting passageways at the Navy Yard, Puget Sound, Bremerton, Wash., to WHITE & FRANKLIN FIREPROOFING CO., of Seattle, Wash., at $148,476. When the bids were received on March 21, it was found that they were all in excess of the appropriation of $150,000. (These bids were given in Engineering News, March 26). Modifications were made in the specifications and the bids were calculated on the basis of the construction of the building alone, leaving out the heating, electric wiring and plumbing. This left the White Company low and the contract was awarded to them about April 22. That was the only award made on this work. The notice of award to McInnes & Reed, Portland, Ore., which appeared in Engineering News, April 9, was incorrect.

OGDEN, UTAH.—Bids are asked until 3 p. m., June 9, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the low pressure steam heating apparatus for the extension to the U. S. post-office and court-house building at Ogden.

WINNIPEG, MAN.—The MANITOBA IRON WORKS CO., of this city, has been awarded the contract for supplying the steel work for the new examining warehouse to be erected here. Price, $100,000. The building will cost approximately $400,000. The general contract has been let to the J. McDIARMID CO., Langside & Portage Sts., Winnipeg. Noted on April 16.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

AUGUSTA, ME.—Bids are asked until noon, May 19, by Augustus B. Farnham, Adjutant Gen., State of Maine, for installing a water supply system complete at the State Muster Field in Augusta.

CAMBRIDGE, MASS.—Bids are asked until noon, May 7, by the Cambridge Water Board for furnishing the following cast-iron pipe and special castings: One 30-in. 1/16 bend; two 30-in. ⅛ bend; 1,250 ft. of 30-in. pipe. Edwin C. Brooks is Supt. Bd.

NEWPORT, R. I.—The Council has passed a resolution providing for an appropriation of $32,000 for repairing the pumping station and for an emergency main connecting with Covington.

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply, until 11 a. m., June 2, for the construction of the Rondout siphon, a deep pressure tunnel lined with concrete 14½ ft. inside diameter and about 23,360 ft. long.

*STAATSBURG, N. Y.—Contracts for the construction of the water-works at Staatsburgh have been awarded as follows: Construction work, H. D. CR[illegible]ALL & SON CO., of East Boston, M[illegible] steel pipe, AMERICAN SPIRAL PIPE WORKS.

*BRIDGETON, N. J.—Plans and specifications are on file at the office of Engineering News, New York, for rep[illegible] the water-works reservoir. Bids are [illegible]d until May 11.

MORRISTOWN, N. J.—[illegible] Normandy Water Co. has been incorpor[illegible] with a capital stock of $150,000. Jo[illegible] D. Canfield, Morristown, is interested.

FRANKLIN, PA.—The citi[illegible] have voted in favor of issuing $200,000 [illegible] bonds to purchase the water plant.

JOHNSTOWN, PA.—The J[illegible]town Water Co. has purchased a site abo[illegible] Roxbury, five miles from here, and will co[illegible]ct a reservoir there this summer, havi[illegible] capacity of 750,000 gallons, and estimat[illegible] cost about $30,000. The company has [illegible] purchased a site on Franklin St., and w[illegible] erect a new pumping station which will [illegible] the water from the present main thro[illegible] the Eighth Ward to the proposed new [illegible]rvoir. New mains will be laid into Roxbu[illegible] Frank Howard is Gen. Mgr.

HUMMELSTOWN, PA.—The [illegible]xtang Consolidated Water Co. may con[illegible] a filter plant along the banks of the [illegible]atara Creek at Hummelstown with a daily capacity of 2,000,000 gallons. The plant will be located a short distance from the railroad station and will supply water to Hummelstown.

BALTIMORE, MD.—Bids were opened by the Board of Awards on April 29 for constructing the superstructure of the East Falls Ave. pumping station. The lowest bid was submitted by the Noel Construction Co., German and Calvert Sts., Baltimore, at $179,200.

*FORT MONROE, VA.—Bids are asked until 10 a. m., June 1, by Capt. Ernest R. Tilton, Constructing Q. M., U. S. A., for the erection of four 50,000-gallon steel water tanks on parapet here.

PARKERSBURG, W. VA.—The city contemplates constructing new water-works with a capacity of about 4,000,000 gallons daily. Chapin & Knowles, Pittsburg, Pa., are Engrs.

SHELBY, N. C.—Bids are asked until June 1 by the city for the construction of water-works. H. E. Knox, Shelby, is Engr.

SYLVESTER, GA.—The citizens have voted in favor of issuing $20,000 of bonds for the construction of water-works.

ATLANTA, GA.—Bids are asked by the Board of Water Commissioners until 4 p. m., May 13, for the construction of a pump house, foundations, etc., at Hemphill pumping Station No. 2. Park Woodward is Gen. Mgr. Atlanta W-Wks.

PRENTISS, MISS.—P. H. PORTER, of Prentiss, has been awarded the contract by the city for the construction of water-works, including power-house and pumping plant, at $12,213. George W. Clough, Prentiss, is Engr.

VERSAILLES, KY.—THE SCHEFOLD CO., of New Albany, Ind., has been awarded the contract by the Mayor and Council for constructing a complete water-works system, with brick pump house, at $32,000. The Holmboe Co., Lincoln Bank Bldg., Louisville, Ky., are Engrs.-in-Charge. List of bidders noted last week.

LOUISVILLE, KY.—B. B. Davis, Masonic Bldg., Louisville, will prepare plans and specifications for water-works to supply the county buildings. Two wells will be sunk and a tank of about 250,000 gallons capacity will be built.

BRYAN, OHIO.—Bids are asked by the Board of Public Service, until noon, May 13, for furnishing and laying complete about 4,130 ft. of standard weight 4-in. hub and spigot cast-iron pipe, and about 3,800 ft. of 6-in., furnishing and setting ten 4-in. hydrants, three 6-in. valves, etc. R. L. Starr is Pres. Bd.

SANDUSKY, OHIO.—We are officially advised that the following bids were received on May 1 by the Board of Public Service for furnishing and installing two 6,000,000-gallon centrifugal pumps, with direct-connected reciprocating or turbine-condensing engines, to be operated with 80 lbs. steam pressure, with a total pumping head of 25 ft., providing for about 9 and 16-ft. discharge, including foundation, suction and discharge pipes and valves connected therewith, automatic oiling devices and necessary gages; also a duplex air compressor, steam driven, duplex steam cylinders, duplex compound air cylinders, with fly-wheel connections, to be constructed to deliver 1,000 cu. ft. free air at a 5-lb. pressure, with steam boiler pressure at 80 lbs. to operate with about 150 r. p. m.: Pumps—Dayton Hydraulic Machinery Co., $4,300; R. D. Wood & Co., 400 Chestnut St., Philadelphia, Pa., $4,895; D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, $5,000; Platt Iron Works Co., 100 Broadway, New York, $5,410; H. R. Worthington, $5,500; Allis-Chalmers Co., Milwaukee, Wis., $6,200; Dravo, Doyle & Co., Arcade Bldg., Philadelphia, $6,750. Compressor—Burry Compressor Co., $1,868; Laidlaw-Dunn-Gordon Co., 115 Broadway, New York, $1,735; Ingersoll-Rand Co., 11 Broadway, New York, $2,050; American Air Compressor Works, $1,793; Blaisdell Machinery Co., Bradford, Pa., $2,400; Hall Steam Pump Co., $1,900. Clifford M. King is City Engr.

COLLINSVILLE, ILL.—Bids were received on April 23 by the Board of Local Improvements for the construction of (a) water-works extension, (b) septic tank: Charles A. Stookey, Belleville, Ill., (a) $14,750; T. C. Brooks & Sons, Jackson, Mich., (a) $13,620; H. E. Ross, Duquoin, Ill., (a) $16,850; (b) $5,287; PETER JOHNSON & CO., (a) $15,521; (b) $4,526 (award-

ed contract); Ora T. Dunlap, Edwardsville, Ill., (a) $7,051; H. C. Gass, Belleville, Ill., (b) $5,795. A. C. Powell is City Engr.

JOLIET, ILL.—MONAHAN BROS. have been awarded the contract by the Board of Local Improvements for the construction of a water system for the Seventh Ward at $6,859. William Moran bid $7,179 for this work. Hubert A. Stevens is City Engr.

DIKE, IOWA.—The plans of Roland & Turner, Consulting Engrs., Des Moines, Ia., for the construction of water-works for this place have been accepted by the Town Board.

HARDIN, MONT.—The Big Horn Water Users' Association have awarded the contract to BAIR & SHEPHERD, of Butte, Mont., for constructing the irrigating canal. The contract includes all of the concrete and masonry work of the intakes, in addition to the digging of the canal. When the ditch is completed several thousand acres of land on the Crow reservation will be watered. The contract price is approximately $15 per acre.

FORT ASSINNIBOINE, MONT.—Bids are asked by J. E. Sawyer, Ch. Q. M., St. Paul, Minn., until May 21, for the construction of a 150,000-gallon steel water tank and trestle here.

*NEOSHO, MO.—Bids are asked by the Commissioner of Fisheries, Department of Commerce and Labor, Washington, D. C., until 2 p. m., June 6, for the construction of a reservoir and pipe system at the U. S. Fisheries Station.

*ALTA LOMA, Tex.—Bids are asked by the City Commissioners of the City of Galveston, Tex., until noon, May 28, for furnishing, delivering and erecting the complete mechanical equipment of an air-lift pumping station, consisting of one 1,200 cu. ft. air compressor; one 700 cu. ft. air compressor; one 200-HP. water tube boiler; and all necessary accessories, including about 16,615 ft. of air pipe to wells. John D. Kelley is City Secy.

OKLAHOMA CITY, OKLA.—GEORGE H. KEEFER, Mount Carmel, Pa., was awarded the contract on April 28 by the Water Committee for the construction of a clear well and sedimentation basin at the water-works plant at $11,205 and $10,695, respectively.

COLORADO SPRINGS, COLO.—A reservoir to cost about $100,000 is to be constructed this summer by the Beaver Land & Irrigation Co., on the Shaefer ranch, owned by Colorado Springs, on Beaver Creek, 13 miles from Florence, and negotiations with the City Council for the purchase of the property have been entered into.

MONTEREY, N. L., MEX.—Bids are asked until noon, May 18, by the Manager of Monterey Water-Works and Sewer Co. Ltd., 161 Matamoros St., Monterey, for lining and roofing two reinforced concrete service reservoirs, each of 10,000,000 gallons capacity, and inlet and outlet chambers, valve houses and other incidental work in connection therewith, for the water supply of the city of Monterey. The materials for the works will be supplied by the company, all the necessary plant and labor for their complete execution being provided by the contractor.

ROSWELL, N. MEX.—Bids are asked by John W. Poe, Chn. Water & Sewer Comn., until May 22 for constructing a system of water-works and sewers. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.-in-Charge.

MARYSVALE, WASH.—The State Board of Land Commissioners, Salt Lake City, according to the Salt Lake City "Republican," has decided to undertake the irrigation project which has been under contemplation for some time. This involves the construction of an immense reservoir in Piute County which will cost $250,000. The tract to be irrigated will include 22,000 acres in Sanpete and Sevier Counties. The capacity of the reservoir will be 68,000 acre ft. The work will be commenced in June, with the building of the tunnel for which bids will be asked. Bids were already asked for this work, but after the bids had been received the lowest tenderer withdrew and the commissioners decided to readvertise. Although the lands which it will serve are in Sanpete and Sevier Counties, the reservoir will be located ten miles south of Marysvale in Piute County.

SUNNYSIDE, WASH.—Bids are asked by the U. S. Reclamation Service, Portland, Ore., until July 15 for the construction of Sulphur Creek wasteway channel and structures near Sunnyside.

SANTA CLARA, CAL.—Bids are asked by the Board of Trustees, until 8 p. m., May 11, for furnishing materials and labor for the improvement of the municipal pumping plant. D. O. Druffel is Pres. Bd.

KAMAS, UTAH.—The corps of civil engineers of the Brigham Young University, under the supervision of A. Jarvis, have completed the running of three different lines of surveys for the construction of the canal and reservoir to bring under irrigation 8,500 acres of land on Provo bench. The proposed reservoir is situated in the neighborhood of Kamas, Summit County, at the head of the Provo River, and will have five small and three medium lakes having a storage capacity sufficient to bring under cultivation 8,500 acres. The course of the water from the reservoir will be down the Provo River until a given point in Provo canyon is reached, where the head of the canal will be located.

GUELPH, ONT.—Bids are asked until May 18 by the Water-Works Department, J. J. Hackney, Mgr., for a high-duty pumping engine, water tower and foundation, and 3,000 ft. of cast-iron pipe. Davis & Johnson, Berlin, Ont., are Engrs.

GODERICH, ONT.—PETER NICHOLSON, Meneton, Ont., has been awarded the contract for the construction of two sedimentation tanks here at about $9,000. J. Grant McGregor is Town Engr.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

SPRINGFIELD, MASS.—The Board of Public Works on April 25 awarded the contract for the construction of the sewer from Walnut to Front Sts. to the BYRNE CONTRACTING CO., 53 State St., Boston, Mass., at $2.40 per ft.

DANBURY, CONN.—The Public Works Committee of the Common Council opened bids on April 27 for the construction of sewers as follows: Main and South St. sewer, Charles Ippolito, Orange, N. J., $22,302; Pearson Engineering & Construction Co., Bristol, Conn., $20,215; Long & Little, Waterbury, Conn., $21,562; Alfred L. Davis, Danbury, $16,870; Peter Sweeney, Danbury, $13,655. Pleasant St. sewer, Charles Ippolito, $4,513; Pearson Engineering & Construction Co., $5,791.80; Long & Little, $4,886; W. A. White, Danbury, $5,511; A. L. Davis, $4,050; Peter Sweeney, $3,598; Cowin & Co., $3,517. Town Hill Ave. sewer, Charles Ippolito, $3,463; Pearson Engineering & Construction Co., $3,440; Long & Little, $5,015; W. A. White, $4,574; A. L. Davis, $3,702; Peter Sweeney, $2,992; Cowin & Co., $3,550. Lake Ave. surface water sewer, Peter Sweeney, $3,584; Cowin & Co., $3,113; Benjamin & Co., $3,331. John J. Hill is Chn. Com.

SHELTON, CONN.—The following bids were opened on April 27 by the Board of Warden and Burgesses for the construction of pipe sewers: F. B. & M. H. O'Neill, Hartford, Conn., $11,908; Edward Tracy, Derby, Conn., $11,948; Pasquale Madorno, Shelton, $12,621; Ryan Unmack Co., New Haven, Conn., $13,204; Dwyer & Mannix Co., New Haven, Conn., $14,088; Evelin Bros., New Britain, Conn., $15,285; Frank Brault, Ansonia, Conn., $15,628; A. M. Cusack, Boston, Mass., $15,770; J. B. O'Rourke, Ansonia, $18,747. A. Curtiss is Clk. Bd.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Pres. Boro. of Manhattan, until 2 p. m., May 11, for repairing brick and pipe sewers and appurtenances during the year 1908.

NEWARK, N. J.—According to the report of the Passaic Valley Sewage Commissioners and the special engineers, made public on April 21, the total cost of the proposed trunk sewer to drain the Passaic Valley will be $12,250,000.

TRENTON, N. J.—Bids are asked by Harry B. Salter, City Clk., until 8 p. m., May 19, for the construction of a sewer in Short St.

*HUNTINGDON, PA.—Bids are asked by J. Murray Africa, Boro. Engr., until 2 p. m., May 15, for the construction of sewers: Approximate lengths: 5,000 ft. of 5-in., 6,600 ft. of 10-in., 2,000 ft. of 22-in.; 900 ft. of 12-in., 2,400 ft. of 15-in.; 860 ft. of 18-in. and 1,420 ft. of 20-in., 33 manholes, 11 lantern holes.

*PHILADELPHIA, PA.—We are officially advised that the following are the lowest bids received on April 22 by the Public Works Department for the construction of main sewers: Frankford intercepting system in Wakeling St.: Edwin H. Vare, 710 Betz Bldg., Philadelphia, 200 ft. of 13-ft. 6-in. diameter brick sewer in full rubble cradle, 8-ft. deep earth excavation, $45 per lin. ft.; 110 ft. of 13-ft. 6-in. diameter brick sewer in reduced rubble cradle, 16-ft. deep earth excavation, $42 per lin. ft.; 240 ft. of 13-ft. 6-in. diameter brick sewer, without cradle, 30-ft. deep, one-half earth, one-half rock excavation, $41.50 per lin. ft.; 271 ft. of 12-ft. 6-in. diameter brick sewer, in full rubble cradle, 5-ft. deep earth excavation, $41 per lin. ft.; 50 ft. of 12-ft. 6-in. diameter brick sewer, in reduced rubble cradle, 3-ft. deep earth excavation, $40.50 per lin. ft. Cobbs Creek intercepting sewer: Thomas F. Reilly, 918 Harrison Bldg., Philadelphia, 1,000 ft. of 4-ft. 9-in. diameter brick sewer, in reduced rubble cradle, 12-ft. deep, earth excavation, $11.33 per lin. ft.; 2,724 ft. of 4-ft. 9-in. diameter brick sewer, without cradle, 14-ft. deep, two-thirds earth, one-third rock excavation, $8.89 per lin. ft. Jasper St. sewer: Adolph Jafolla, 767 South Eighth St., Philadelphia, 1,168 ft. of 4-ft. diameter brick sewer, in reduced rubble cradle, 10-ft. deep, earth excavation, $9.45 per. lin. ft.; one junction chamber, $1,400. Tulip St. sewer: Adolph Jafolla, 822 ft. of 5-ft. 6-in. diameter brick sewer, in reduced rubble cradle, 15-ft. deep, earth excavation, $14.30 per lin. ft.; one separating chamber, $1,200; one junction chamber, $1,200. Jackson St. sewer: Ryan & Reilly, 14 South Broad St., Philadelphia, 342 ft. of 6-ft. 6-in. diameter brick sewer, in reduced rubble cradle, 6 ft. deep, earth excavation, $17.77 per lin. ft.; 442 ft. of 6-ft. diameter brick sewer, in reduced rubble cradle, 8 ft. deep, earth excavation, $15.59 per lin. ft.; 437 ft. of 5-ft. 6-in. diameter brick sewer, in reduced rubble cradle, 12 ft. deep, earth excavation, $14.71 per lin. ft.; 450 ft. of 5-ft. diameter brick sewer, in reduced rubble cradle, 14 ft. deep, earth excavation, $14.06 per lin. ft.; 450 ft. of 4-ft. 6-in. diameter brick sewer, without cradle, 16 ft. deep, earth excavation, $7.43 per lin. ft.; 433 ft. of 4-ft. diameter brick sewer, without cradle, 14 ft. deep, earth excavation, $6.89 per lin. ft. 64th St. sewer: Thomas F. Reilly, 1,158 ft. of 4-ft. 6-in. diameter brick sewer, without cradle, 18 ft. deep, one-half earth, one-half rock excavation, $12.47 per lin. ft. 69th St. sewer: Lombardi & Pascuzzi, 733 Fulton St., Philadelphia, 300 ft. of 5-ft. 6-in. diameter brick sewer, in full rubble cradle, 4 ft. deep, earth excavation, $12.55 per lin. ft.; 262 ft. of 5-ft. 6-in. diameter brick sewer in reduced rubble cradle, 6 ft. deep, earth excavation, $11.80 per lin. ft.; 400 ft. of 5-ft. diameter brick sewer, in full rubble cradle, 4 ft. deep, earth excavation, $11.80 per lin. ft.; 127 ft. of 5-ft. diameter brick sewer, in reduced rubble cradle, 8 ft. deep, earth excavation, $11.40 per lin. ft.; one junction chamber, $1,250. The Boulevard sewer from Faunce to Hartel Sts.: Edwin H. Vare, 1,280 ft. of 13-ft. diameter brick sewer, in full rubble cradle, 6 ft. deep, earth excavation, $44.45 per lin. ft.; this includes a trench 350 ft. long, 20 ft. wide, 3 ft. deep; 440 ft. of 4-ft. diameter sewer, 110 ft. of 4-ft. 6-in. diameter sewer, an outlet wall and intake wall, also three feet of embankment over the entire sewer. Sewer across the Boulevard on line of Tyson St.: David Peoples, 1000 Betz Bldg., Philadelphia, 200 ft. of 7-ft. × 7-ft. brick sewer in full rubble cradle, 6 ft. deep, earth excavation, low bid, $21 per lin. ft.; 170 ft. of 7-ft. × 7-ft. brick sewer, in reduced rubble cradle, 12 ft. deep, one-half earth and one-half rock excavation, $25 per lin. ft. Oxford Ave., sewer to and across The Boulevard: Ryan & Reilly, 517 ft. of 5-ft. diameter brick sewer, in reduced rubble cradle 12 ft. deep, one-half earth, one-half soft rock excavation, $12.75 per lin. ft.; 300 ft. of 5-ft. diameter brick sewer, without cradle, 20 ft. deep, one-third earth, one-third soft rock, one-third hard rock excavation, $12.75 per lin. ft.; one junction chamber, $800. Oakland St. sewer across the Boulevard: Edwin H. Vare, 381 ft. of 12 ft. × 12-ft. brick sewer, in full rubble cradle, 7 ft. deep, earth excavation, $45.39 per lin. ft.; (the above price includes an intake wall, outlet wall, 100 ft. of trenching and supporting a 30-in. and 48-in. water main on trestle work, also three feet of embankment over the entire sewer). Oakland St. sewer extension, Foust to Vankirk Sts.: Bolger & Cummins, 205 Chelten Trust Bldg., Philadelphia, 842 ft. of 12-ft. 9-in. diameter brick sewer, in full rubble cradle, 6 ft. deep, earth excavation, $31.13 per lin. ft.; the above price includes an intake wall, 100 ft. of trenching and three feet of embankment over the entire sewer. George R. Stearns is Dir. Pub. Wks.

Contracts were awarded on April 25 as follows: Frankford intersecting sewer. E. H. VARE, $36,716; Cobb Creek intercepting sewer, Thomas F. Reilly, $35,546; Oakland St. sewer BOLGER & CUMMINS, $20,211; Jackson St. sewer, RYAN & REILLY, $32,050; 64th St. sewer, THOMAS F. REILLY, $14,440; 69th St. sewer, from Dicks to Elmwood Aves., LOMBARDI & PASCUZZI, $14,234; sewer along Northeast Boulevard from Faunce to Hartell Sts., E. H. VARE, $56,896; across Northeast Boulevard, on line of Tyson St., DAVID PEOPLES, $8,450; along Oxford Ave., across Northeast Boulevard, RYAN & REILLY, $11,216; Oaklyn St., across Northeast Boulevard, E. H. VARE, $17,293.

GALLITZIN, PA.—Bids are asked by Harry F. Conrad, Boro. Secy., until noon, May 11, for the construction of a vitrified clay pipe and concrete sewer in Saint Thomas and Church Sts. Henry & Dillman, Altoona, Pa., are Engrs.

*ARDMORE, PA.—Bids are asked until noon, May 23, by the Township Commissioners of Overbrook and Merion, Pa., 205 Main Bldg., Ardmore, for the construction of 2,450 ft. of 12-in. terra-cotta sewer and 2,050 ft. of 10-in. terra-cotta sewer in Merion Ave., and 3,000 ft. of 8-in. terra-cotta sewer in Highland Ave., averaging from 5 to 18-ft. in depth, including 27 manholes and all appurtenances complete. Robley A. Warner, C. E., is Supt. of Health and Drainage.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have awarded contracts as follows for sewers in the District: To E. G. GUMMEL, 300 Rhode Island Ave., N. W., Washington, at $3,773, and an east side intercepting sewer to the WARREN F. BRENIZER CO., Second and O Sts., S. E., Washington, at $16,269.

Bids were received as follows on April 29 at the office of the Commissioners of the District of Columbia for the construction of four sewers: (a) E. G. Gummel, 300 Rhode Island Ave., Washington; (b) James A. Coyle, Washington, D. C.; (c) Lyons Bros., Washington, D. C.; (d) Warren F. Brenizer Co., Second and O Sts., S. E., Washington, D. C.: Sewer "A", ordinary excavation, (a) $1, (b) 90 cts., (c) $1, (d) 85 cts.; sewer brick masonry, (a) $18, (b) $18, (c) $22, (d) $15; federal brick masonry, (a) $20, (b) $22, (c) $25, (d) (18); concrete masonry "D", (a) $10, (b) $9, (c) $12, (d) $9; Sewer "B", ordinary excavation, (a) $1, (b) 64 cts., (c) $1, (d) $1.10; sewer brick masonry, (a) $18, (b) $16, (c) $18, (d) $15. 15-in. diameter pipe, (a) $1, (b) 95 cts., (c) $1.30, (d) 95 cts.; sewer "C", ordinary excavation, (a) 80 cts., (b) 62 cts., (c) 90 cts., (d) $1; sewer brick masonry, (a) $16, (b) $16, (c) $18, (d) $16; 12-in. pipe, (a) 70 cts., (b) 70 cts., (c) $1.20, (d) 90 cts.; Sewer "D", ordinary excavation, (a) 80 cts., (b) 60 cts., (c) 95 cts., (d) 90 cts.; sewer brick masonry, (a) $16, (b) $14, (c) $20, (d) $15. 18-in. pipe, (a) $1, (b) $1, (c) $1.18, (d) $1. 15-in. pipe, (a) 90 cts., (b) 90 cts., (c) $1.13, (d) 95 cts.; 12-in. pipe, (a) 70 cts., (b) 70 cts., (c) $1.08, (d) 85 cts.

*WASHINGTON, D. C.—Bids are asked by the Commissioners of the District of Columbia until noon, May 11, for the construction of sewers.

PARKERSBURG, W. VA.—The following bids were received on April 28 by the Board of Affairs for the construction of a 15-in. sanitary sewer: CENTRAL CONSTRUCTION CO., Parkersburg, $7,159 (awarded contract); J. W. Curry, Parkersburg, $7,463; B. F. Stewart, Jr., Parkersburg, $7,926; S. H. De Groodt, Youngstown, Ohio, $7,579. John V. Dunbar is City Engr.

MONROE, N. C.—J Shute & Sons contemplate extending their 10-in. sewer line about 2,500 ft. Plans are being prepared by F. F. Wetmore, of Lumberton, N. C.

SHELBY, N. C.—Bids are asked until June 1 by the city for constructing a sewer system. H. E. Knox is City Engr.

VERSAILLES, KY.—THE SCHEFGLD CO., New Albany, Ind., has been awarded the contract by the Mayor and Council for the construction of a complete sewer system at $20,500. Drake C. Naine is Clk. Council. List of bidders noted last week.

WARREN, OHIO.—Bids were received by the Board of Public Service on April 27 for the construction of the West Market St. sewer and laterals as follows: W. T. Smith, Warren, 2,250 ft. of 15-in. pipe, 81 cts. per ft.; 5,210 ft. 12-in. pipe, 57 cts.; 15-in. × 6-in. Ys, 95 cts.; manholes, $25.10; lamp holes, $2.97; 1,000 ft. of rock excavation, 1 ct.; George Dennis, Warren, 15-in. pipe, 64 cts.; 12-in., 48 cts.; connections, 80 and 50 cts.; manholes, $25; lamp holes, $2; excavation, 1 ct. Ferry & Co., New Castle, Pa., 15-in. pipe, 94 cts.; 12-in., 66 cts.; connections, 70 and 45 cts.; manholes, $33; lamp holes, $5; excavation, 10 cts. Gartland Bros., Youngstown, Ohio, 15-in. pipe, 85 cts.; 12-in. 63 cts.; connections, 80 and 64 cts.; manholes, $29.70; lamp holes, $2.75; excavation, nothing. Lucius Bros., Pittsburg, Pa., 15-in. pipe, 80 cts.; 12-in., 60 cts.; connections, $1.05 and 77 cts.; manholes, $28; lamp holes, $2.50; excavation per cu. yd., $1.10. F. C. Armstrong, Warren, 15-in. pipe, 75 cts.; 12-in., 53 cts.; connections, $1 and 75 cts.; manholes, $26; lamp holes, $2.50; excavation, 1 ct. Wiles & Davidson, Akron, Ohio, 15-in. pipe, 93 cts.; 12-in. 64 cts.; connections, 85 and 65 cts.; manholes, $32; lamp holes, $2; excavation, 30 cts. Victor Ohlson, Youngstown, Ohio, 15-in. pipe, 79 cts.; 12-in., 62 cts.; connections, 70 and 55 cts.; manholes, $32.50; lamp holes, $2.50; excavation, 10 cts. Contract has been let to GEORGE DENNES.

CINCINNATI, OHIO.—Bids are asked until noon, May 11, by the Board of Public Works for constructing sewers and drains in Nevada St. John J. Wenner is Clk. Bd.

CINCINNATI, OHIO.—The City Council has passed an ordinance providing for the construction of a storm water relief sewer in Central Ave. Estimated cost, $55,750.

*CHILLICOTHE, OHIO.—Bids are asked until noon, May 28, by the Board of Public Service for constructing 3,000 ft. of reinforced storm water sewer. Cost, $30,000. H. M. Redd is City Engr.

JEFFERSONVILE, IND.—The Board of Public Works has decided to have a complete sewer system constructed for those portions of the city west of Mechanic St., east of Indiana Ave. and north from the river to 15th St. V. W. Lyon is City Engr.

WEST LAFAYETTE, IND.—Bids are asked until 7.30 p. m., May 18, by the Board of Trustees for the construction of a 12-in. vitrified pipe sewer in Vine St., from Oak St. to Lawn Ave., with an 8-in. lateral of vitrified sewer pipe in the alley between Oak St. and Lawn Ave. from Grant St. to Vine St. Charles T. Stallard is Town Clk.

DETROIT, MICH.—The Sewer Committee of the Council has allowed $218,044 for sewer improvements for this year. Robert H. McCormick is City Engr.

MOUNT VERNON, ILL.—S. T. Maxey, City Engr., is preparing plans for the construction of a vitrified pipe sewer system. Estimated cost, $45,000. George E. Green is City Clk.

ELGIN, IL.—An ordinance has been passed providing for the construction of a sewer system for the Sixth Ward. Estimated cost, $99,054. William F. Sylla is City Clk.

JOLIET, ILL.—The contract for the construction of the Seventh Ward sewer system was awarded on April 27 by the Board of Local Improvements to MONAHAN BROS., at $13,741. William Moran bid $13,791 for this work. Hubert A. Stevens is City Engr.

WATSEKA, ILL.—M. Caprioni, Chicago, Ill., submitted the lowest bid on April 21, to the East Side Sewer Commission of the City Council for the construction of the East Side sewer, 5,000 ft. long at $5,400.

MILWAUKEE, WIS.—Bids are asked until 10.30 a. m., May 8, by the Board of Public Works for the construction of several sewers. Charles J. Poetsch is City Engr.

MILWAUKEE, WIS.—The Board of Public Works on April 23 awarded the contract for the construction of a relief sewer in Chicago, Milwaukee, Buffalo and Jefferson Sts. to GEORGE J. ZIMMERMAN, 3,102 McKinley Boulevard, Milwaukee, at $9.89 per lin. ft. Charles G. Poetsch is City Engr.

RACINE, WIS.—Bids are asked by the Board of Public Works until 10 a. m., May 9, at the office of the City Clerk for constructing sewers in Wisconsin St. from Fourth to Sixth Sts., and in Sixth St., from Wisconsin St. to College Ave. P. H. Connolly is City Engr.

DULUTH, MINN.—ANDERSON & JOHNSON have been awarded the contract for constructing a sewer in the Central Park district at $6,473.

ST. PAUL, MINN.—The Board of Public Works, R. L. Gorman, Clk., will soon ask for bids for the construction of the Portland-Aldine Park sewer system to be laid here. Estimated cost, $135,000. L. W. Rundlett is City Engr.

SPRINGFIELD, MO.—H. G. Horton, City Engr., is preparing plans for the construction of storm water sewers.

*CAPE GIRARDEAU, MO.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of a sewerage system for sewer district No. 1. Bids are asked until May 18.

HEREFORD, TEX.—The citizens have voted in favor of a $20,000 bond issue for the construction of sewers.

BELLINGHAM, WASH.—Resolutions have been adopted by the Council ordering the Board of Public Works to have plans and specifications prepared for the construction of a trunk sewer in Holly St., from E St. to C St., and in Champion and Holly Sts., from Magnolia to C Sts. Harry W. Troutman is City Engr.

SAN FRANCISCO, CAL.—The Board of City Supervisors has appropriated the sum of $375,000 for the reconstruction of, and $187,400 for repairing and cleaning sewers. Marsden Manson is City Engr.

SONORA, CAL.—Bids are asked by the Board of Trustees until 8 p. m., May 11, for laying a sewer pipe line of salt glazed vitrified 6-in. sewer pipe. C. H. Burdon is Pres. Bd.

BARRIE, ONT.—C. H. Mitchell, C. E., Traders' National Bank Bldg., Toronto, Ont., is preparing plans and estimates for the construction of a complete sewerage system for the Fifth and Sixth Wards.

HAMILTON, ONT.—A sewage disposal plant will be constructed here. Estimated cost, $135,000. J. R. Heddle is Asst. City Engr.

*BRANTFORD, ONT.—Bids are asked by Samuel Suddaby, Chn. Bd. of Wks., until noon, May 21, for furnishing and laying about 1,700 ft. of double strength 15-in. sewer pipe. Average cut 10¾ ft.; about 2,000 ft. of 12-in. sewer pipe, average cut, 18 ft., and 750 ft. of 12-in. cast-iron pipe, including crossing of Grand River, average cut, 7 ft. These pipes furnished by the city; about 1,750 ft. of 12-in. extra strength sewer pipe, and 450 ft. of 12-in. cast-iron pipe, average cut 16 ft. T. Harry Jones is City Engr.

GARBAGE DISPOSAL.

SYRACUSE, N. Y.—C. L. AMOS has been awarded the contract by the city, at $9,126, for flushing asphalt streets for the next seven months. The contract provides for the operation of four street flushing machines recently purchased by the city for 16 hrs. each day, two shifts of teams working on each flusher for eight hours each. The contractor is to pay the city $100 rental for each of the four machines and provide his own foremen and hydrant men and other employes. The rate for each of the eight teams employed upon which the bid was based was $7.22 per day.

PITTSBURG, PA.—The Bennett Garbage Disposal Co. has been incorporated with a capital stock of $35,000. A. P. Opdyke, Wilkes-Barre, Pa., is interested.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

LYNN, MASS.—JOHN W. SHEEHAN, of Lynn, has been awarded the contract by the Board of Public Works for laying granolithic sidewalks, curbs and gutters for the year at 17½ cts. per sq. ft. for sidewalks with a 16-in. excavation, and 18 cts. per sq. ft. with a 20-in. excavation; 70 cts. per lin. ft. for straight curb and 80 cts. per lin. ft. for curved curb; 54 cts per lin. ft. for gutters 3 ft. wide and 20 cts. per sq. ft. for driveways.

*FORT ANDREWS (Boston post-office), MASS.—Bids are asked until 11 a. m., June 1, by Capt. Ira L. Fredendall, Constructing Q. M., U. S. A., Summer St., Boston, Mass., for grading, constructing macadam roads, concrete walks, etc., here.

HARTFORD, CONN.—The Board of Contract and Supply on May 4 opened the following bids for the resetting of curb on Asylum and intersecting streets: A. Danielson & Co., $3.24; Billings Sidewalk & Coal Co., $3; Alexander Watson, $3; A. S. Freeburg, $3.

HARTFORD, CONN.—Bids are asked until 3 p. m., May 11, by the State Highway Commissioner for the construction of three sections of road in the towns of Meriden and Southington as follows: On the Southington-Meriden road, 1,665 lin. ft.; on the Meriden-Waterbury turnpike, 2,767 lin. ft.; on Southington Ave., 3,915 lin. ft. The specifications call for one 20-in. and two 12-in. vitrified tile culverts.

WATERBURY, CONN.—Bids for paving North Main, South Main, Benedict, East Farm Sts. and Hamilton Ave. were received on April 28 by the Board of Commissioners of Public Works as follows: For paving East Farm St. from North Main St. to Round Hill St.: Henry Keller, Metropolitan brick, per sq. yd., $3; Shawmut shale, $2.96; Edward McManus, Waterbury, $3.12½; Reynoldsville brick, Henry Kellar, $2.94; Edward McManus, $3.12½; Mack block, Henry Kellar, $3.08; Edward McManus, $3.12½; F. T. Ley Co., $3.08; Hassam Paving Co., $3.25; Johnsonburg block, Henry Kellar, $3; Edward McManus, $3.12½; F. T. Ley Co., $3.05; Hassam Paving Co., $3.35; granite blocks, Henry Kellar, $2.90; Edward McManus, $3.80; Shawmut Finday blocks, Edward McManus, $3.12½; Hassam Paving Co., $3.23; Canton shale metropolitan blocks, Edward McManus, $3.12½; bluestone curbing, per lin. ft.: Henry Kellar, 90 cts.; Edward McManus, $1; F. T. Ley Co., 65 cts.; Hassam Paving Co., 80 cts; resetting curb, per lin. ft.: Henry Kellar, 25 cts.; Edward McManus, 12½ cts.; F. T. Ley Co., 20 cts.; Hassam Paving Co., 15 cts.; all the Hassam bids are for pavements withe Hassam foundation.

For paving South Main St., from the present pavement to City Corners, Hamilton Ave., from East Main St. to the Mad River; Benedict St., from Clay to Jewelry Sts., and North Main St., from West Farm to Tudor Sts.: John F. Kerwin, New Brunswick, N. J., Johnsonburg shale block, $2.75 per sq. yd.; Mack block, No. 1, $2.73; Shawmut shale, $2.63; Reynoldsville block, $2.66; Shawmut fire clay blocks, $2.74; curbing, 60 cts. per lin. ft.; resetting curb, 15 cts. per lin. ft.; Fred. T. Ley Co., Inc., Johnsonburg blocks, $2.94; Mack blocks, $2.97; curbing, 65 cts. per lin. ft.; resetting curb, 20 cts. per lin. ft.; Hassam Paving Co., Hassam paving, $1.90; Johnsonburg block with Hassam foundation, $3.30; Mack block with Hassam foundation, $3.30; Shawmut blocks with Hassam foundation, $3.18; curbing, 80 cts. per lin. ft.; resetting curb, 15 cts. per lin. ft.

NEW HAVEN, CONN.—The Board of Finance has decided to issue $100,000 of bonds for street paving.

NEW YORK, N. Y.—Bids are asked until 2 p. m., May 11, by John F. Ahearn, Pres. Boro. of Manhattan, for repairing and maintaining sheet asphalt pavement in the southern, central and northern sections of the Borough of Manhattan.

MONROE, N. Y.—Bids are asked by the Village Trustees until May 12 for the construction of about 12,000 sq. ft. of concrete sidewalks and driveways, and 2,400 lin. ft. of curb and cobblestone gutter. T. F. Bayard Carpenter is Village Clk. Fred. J. Knight is Engr.

NEW YORK, N. Y.—The following bids were opened on April 16 at the office of Louis F. Haffen, Pres. Bronx Boro., for paving with asphalt block and with granite block on concrete foundation the roadway of 189th St., from Fordham Road to Southern Boulevard, and setting curb where necessary: (a) Barber Asphalt Paving Co., 114 Liberty St., $84,425; (b) Asphalt Construction Co., $75,792, and (c) Hastings Pavement Co., $77,105.

The following bids for repairing asphalt pavements on bridges over the Harlem River in the Borough of Manhattan during the year 1908 were opened on April 16 by the Department of Bridges: BARBER ASPHALT PAVING CO., $23,256 (awarded contract); Uvalde Asphalt Paving Co., $23,370; Sicilian Asphalt Paving Co., $23,940; Asphalt Construction Co., $25,080.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Pres. Boro. Manhattan, until 2 p. m., May 15, for regulating, grading, curbing, flagging and paving various streets.

NEW YORK, N. Y.—Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., May 20, for regulating, grading and paving and laying cement sidewalks in various streets.

ALBANY, N. Y.—The following bids were received by Frederick Skene, State Engr. and Surv., on May 4 for the improvement of State highways: Fleming Road No. 384, Cayuga County: Joseph H. Connors, Fulton, N. Y., $14,943; Michael F. Dollard, Albany, N. Y., $13,580; F. T. Ley & Co., Springfield, Mass., $15,300. Auburn-Seneca Falls Road No. 590, Sec. 1: Brayer Bros., Auburn, N. Y., $57,563; Michael F. Dollard, Albany, N. Y., $56,015; F. T. Ley & Co. Springfield, Mass., $55,000. Little Falls-East Creek Road No. 456, Herkimer County: Martin Murray, Troy, N. Y., $32,997; C. R. Lewis, Ilion, N. Y., $41,000; Gilchrist & Reardon, Glens Falls, N. Y., $36,586; A. D. Bridges & Son, Hazardville, Conn., $34,500; P. B. McCaghey & Co., Little Falls, N. Y., $44,890; Fred H. Ferris, Mechanicsville, N. Y., $30,000; Beckwith Engineering & Contracting Co. Herkimer, N. Y., $35,789; Joseph Walker, New Paltz, N. Y., $24,500.

BUFFALO, N. Y.—The following contracts have been awarded by the Commissioner of Public Works: For paving Atlantic Ave., 26 ft. wide, with German Rock Asphalt & Cement Co. standard asphalt (Specifications "B") on concrete base, to the GERMAN ROCK ASPHALT & CEMENT CO., at $6,586; for paving Carroll St., 26 ft. wide, with round edge shale brick, to F. V. E. BARDOL, D. S. Morgan Bldg., Buffalo, at $6,200; for repaving Louisiana St., 42 ft. wide, with dressed block Medina sandstone (Specifications "B"), same, at $11,990; for repaving Exchange St. from Hamburg St. to the Indian Reservation line, same; for repaving Metcalf St., 28 ft. wide, with dressed block Medina sandstone (Specifications "B"), same, at $6,400; for paving Woodward Ave., 32 ft. wide, with genuine Trinidad Pitch Lake asphalt (Specifications "B"), to the BARBER ASPHALT PAVING CO., at $5,794.

The following bids have been received for repaving Lafayette Ave., 15,557 sq. yds.: German Rock Asphalt & Cement Co., with standard asphalt, $31,000; Barber Asphalt Paving Co., with Trinidad Pitch Lake asphalt, $35,000; Henry P. Burgard Co., with California, Bermudes or Trinidad asphalt, $35,800. Francis G. Ward is Comr. Pub. Wks.

ATLANTIC CITY, N. J.—THE STANDARD BITULITHIC CO., 422 Union Bldg., Newark, N. J., was awarded the contract on April 27 by the City Council for paving South Carolina and Virginia Aves. with bitulithic, at $37,888. The only other bidder was the Atlantic Bitulithic Co., at about $40,000.

THE DELAWARE RIVER QUARRY & CONSTRUCTION CO. secured the contract for furnishing broken stone, at $1.70 per short ton.

JERSEY CITY, N. J.—Bids are asked until 2 p. m., May 11, by the Board of Street and Water Commissioners for repaving West Newark Ave. with Belgian block. George T. Bouton is Clk. Bd.

*ELIZABETH, N. J.—Bids are asked by the County Road Commisisoners of the Board of Chosen Freeholders, Union County, Elizabeth, until 2.30 p. m., May 26, for the construction of macadam roads in West Grand St., First Ave. and Locust St., and in the Boroughs of Roselle and Roselle Park, from De Hart Place to Westfield Ave., and also for the construction of macadam roads on North Broad St. and Elizabeth Ave., and in the Township of Union from King St. to a point near the Essex County line. Jacob L. Bauer is County Engr.

*NEWARK, N. J.—Bids are asked by the Commissioner of Roads and Assessments of the Board of Chosen Freeholders, until 3 p. m., June 8, for grading and paving with telford pavement several roads. Michael Barry is Dir. Bd.

CAMDEN, N. J.—THE BARBER ASPHALT PAVING CO., Arrot Bldg., Pittsburg, was awarded the contract on April 27 by the city for paving Walnut St., between Fourth and Broadway, and Newton and Seventh Sts., with asphalt, at $1.69 per sq. yd.

ERIE, PA.—MAYER BROS. were awarded the contract on April 27 by the Common Council for resurfacing French St. from Second to Eleventh St., at the following prices: Asphalt top, $1.84 per sq. yd.; concrete base, $6.75 per sq. yd.; new concrete curbing, 65 cts. per ft.; resetting old curbing, 20 cts. per ft.; resetting old stone, 75 cts.; manholes, $65 each; catch basins, $45 each.

WILLIAMSPORT, PA.—Busch & Stewart submitted the lowest bid on April 27 to the Highway Commission for paving Washington St., from Packer to Market Sts., at $1.84 per sq. yd.

PHILADELPHIA, PA.—The Board of Public Works on April 25 awarded the contract for the construction of a macadam drive along the Parkway from Logan Square to Fairmount Park to the FILBERT PAVING & CONSTRUCTION CO., at $24,809.

*SALISBURY, MD.—Bids are asked by the Mayor and Council until 8 p. m., May 19, for grading, paving and draining North Division St. T. Chalkley Hatton is Consulting Engr., Wilmington, Del. J. T. Parsons is Clk. Council.

WASHINGTON, D. C.—Bids were received as follows on May 2 at the office of the Commissioners of the District of Columbia for paving First St., between H St. and New York Ave., with granite blocks: (a) W. F. Brenizer Co., Washington, (b) R. J. Beall Construction Co., Washington, (c) Cranford Paving Co., Washington, (d) Brennan Construction Co., Washington: Laying 6-in. concrete base, 9,000 sq. yds.: (a) 70 cts.; (b) 73 cts.; (c) 60 cts.; (d) 59 cts.; laying 6-in. gravel base, 500 sq. yds., (a) 25 cts.; (b) 20 cts.; (c) 7 cts.; (d) 20 cts.; cleaning and laying granite block paving, (a) 58 cts.; (b) 57 cts.; (c) 65 cts.; (d) 90 cts.; relaying granite block paving, 500 sq. yds., (a) 50 cts.; (b) 50 cts.; (c) 45 cts.; (d) 50 cts.; trim grading and rolling, 10,000 sq. yds., (a) 10 cts.; (b) 10 cts.; (c) 9 cts.; (d) 10 cts.

PETERSBURG, VA.—Bids are asked by D. A. Barnes, Supt. Rd. Bd., Dinwiddie County, until May 11, for grading and graveling portions of Cox, Long Ordinary and Boydton plank roads.

LYNCHBURG, VA.—The contract for constructing a macadam road from Lynchburg to Boonsboro, about 4¾ miles, has been awarded by Bedford and Campbell Counties to LANE BROS. of Lynchburg, at about $3,000 per mile. The macadam is to be six inches after rolling and 12 ft. wide. B. W. Hubbard is Superv. Bedford County, Forest Depot, Va.

PARKERSBURG, W. VA.—We are officially advised that the following bids were received by the Board of Affairs on April 28 for curbing and paving (a) Dudley and (b) Murdock Aves.: S. H. DeGroodt, Youngstown, Ohio, (a) $10,721, (b) $5,486; C. SKIDMORE, Parkersburg, (a) $10,226 (awarded contract), (b) $5,794; HUGO HEYDENREICH, Parkersburg, (a) $9,108, without curb, (b) $4,965, without curb (awarded contract); C. T. Cisler, Marietta, Ohio, (b) $5,868. John V. Dunbar is City Engr.

STATESVILLE, N. C.—ORDWAY & CO., of Winston-Salem, N. C., have been awarded the contract by the County Commissioners of Iredell County for grading and macadamizing about 2¼ miles of the Taylorsville road at about $10,000. C. M. Miller, Salisbury, N. C., is Engr.-in-Charge.

PADUCAH, KY.—Specifications are on file at the office of Engineering News, New York, for the improvement of Broadway and Jefferson St. from Ninth to Eleventh Sts. Bids are asked until May 12. L. A. Washington is City Engr.

RICHWOOD, OHIO.—The Council on April 21 awarded the contract for street paving to A. F. LEONARD, of Gallipolis, Ohio, at $1.32 per sq. yd.

CINCINNATI, OHIO.—Bids are asked by the Board of Public Service, John J. Wenner Clk., until noon, May 15, for improving the following streets: Charlotte St., from John St. to Linn St.; estimated cost, $3,177; estimated quantities, 900 cu. yds. of grading, 1,400 lin. ft. of granite curb, 700 sq. yds. of brick paving, constructing drains, etc. Avery St., from Park St to its eastern terminus, 1,100 cu. yds. of grading, 1,350 lin. ft. of granite curb, 1,075 sq. yds. of brick paving; estimated cost, $3,439. Mad Anthony St., from Spring Grove St. to Knowlton St.; estimated cost, $4,505; estimated quantities, 700 cu. yds. of grading, 900 lin. ft. of sandstone curb, 270 cu. yds. of hydraulic concrete, 1,610 sq. yds. of brick paving. Burnet Ave., from Shilito St. to Forest St.; estimated cost, $81,434; estimated quantities, 6,000 cu. yds. of grading, 7,600 lin. ft. of granite curb, 2,000 yds. Portland cement concrete, 6,400 sq. yds. of granite paving, 11,700 sq. yds. of wood block paving.

CINCINNATI, OHIO.—Bids are asked until noon, May 12, by the Board of Public Service, John J. Wenner Clk., for street improvement, and until noon, May 13 and 14 for same.

TOLEDO, OHIO.—Bids are asked by the Board of Public Service until noon, May 14, for the improvement of various streets. Reynold Voit is Secy. Bd.

*MUNCIE, IND.—Bids are asked by the Board of Public Works until 2 p. m., May 19, for grading and paving with brick several streets. John O. Potter is City Engr.

ELKHART, IND.—The following bids were received on April 29 by the Board of Public Works for paving South Main St.: W. W. Hatch & Sons Co., of Goshen, Ind., for Metropolitan block, $44,674. Logan block, $45,084; C. L. Kinney, of Frankfort, Ind., $45,549, for Metropolitan block, $44,321 for Logan block. Both bids were rejected. The Engineer's estimate is $40,089.

BLOOMINGTON, IND.—JAMES SMITH has been awarded the contract by the city for macadamizing West Howe St. and laying cement sidewalks from Madison to Walker Sts, at $12,600.

KOKOMO, IND.—JAMES WATSON was awarded the contract on April 27 by the Board of Public Works for paving Smith St., from Jefferson to North St., at $15,125 for Culver block.

SHAWANO, WIS.—All bids for paving Main St. with tar, macadam, concrete curb and gutter combined, have been rejected by the city.

ST. PAUL, MINN.—The County Board on April 23 awarded contracts for macadamizing Lexington Ave., Edgerton St. and the New Brighton road, and graveling the Upper Afton road. The awards are as follows: Lexington Ave., WILIAM DEVINE, $18,825; Edgerton St., JAMES F. FORESTAL, $16,442; New Brighton road, WILLIAM DEVINE, $6,375; Upper Afton road, JAMES F. FORESTAL, $2,572. The contracts were awarded with the understanding that the gravel is to be furnished by the county from pits designated by the board.

Bids are asked by the Board of County Commissioners until 10 a. m., May 18, for the improvement of various streets.

LAWRENCE, KAN.—Bids are asked until 5 p. m., May 14, by F. D. Brown, City Clk., for grading and paving Vermont St. and grading, curbing and paving Mary St., the work requiring 2,400 cu. yds. excavation, 6,000 sq. yds. brick paving, 2,000 lin. ft. of limestone curbing.

CLEBURNE, TEX.—KLEIN BROS., of Dallas, Tex., have been awarded the contract by the city for the construction of approximately two miles of cement walks and park curbing on Anglin St.

HOUSTON, TEX.—Bids are asked by John B. Ashe, County Audr., until noon, May 12, for paving several roads.

BELLINGHAM, WASH.—PEARSON & WEBEL have been awarded the contract by the city for the improvement of Morris Ave., from Ninth to 14th Aves., by grading and planking, at $6,083. Other bidders were: Campbell & Walker, $6,990; F. Pearson, $6,791; J. L. Likins, $6,856; Ridley & Kavanaugh, $6,318; J. M. Ager, $[illegible]5; Swan Hawkins, $6,675; J. Lich, $7,[illegible].

SPOKANE, WASH.—Bids are asked until 2 p. m., May 15, by Joseph M. Snow, Secy. State Highway Bd., for grading and graveling state aid road No. 13, known as the Forker road.

OLYMPIA, WASH.—Bids are asked by the State Highway Board until 2 p. m., May 15, for grading state aid roads Nos. 9 and 59. Joseph M. Snow is Secy. Bd.

CHEHALIS, WASH.—The contract for paving a portion of the business district of the city with vitrified brick, about 10,000 sq. yds., was awarded on April 24 by the City Council to B. S. DAVIS, of Tacoma, at $49,281.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

*FORT ANDREWS (Boston post-office), MASS.—Bids are asked until 10 a. m., May 29, by Capt. Ira L. Fredendall, Constr. Q. M., for construction, including plumbing, heating, electric wiring and fixtures, of a brick bakery at Fort Andrews, Peddock's Island, Boston Harbor.

WORCESTER, MASS.—The managers of the Crompton & Knowles Loom Works, corner of Grand and Tainter Sts., Worcester, have awarded contracts to E. D. WARD, 82 Foster St., Worcester, amounting to about $155,000, for three additional buildings to be begun at once. They will consist of an administration building and factory combined, a machine shop and a foundry building. A part of the present foundry building and the old stone mill on the Gardner St. side of the plant will be torn down and a larger part of the branch plant on Green St. will be moved into the new buildings. The administration and factory building will be 246 × 60 ft., with the office part running 20 ft. farther along the front, making a frontage of 80 ft. on the Grand St. side. It will be of mill construction, five stories, with an elevator tower. The factory will have two staircases enclosed in brick walls. The building will cost about $70,000. It will be built across the street from the present buildings and will face on Grand St. with Tainter St. between it and the present buildings. The foundry building will be bounded by Tainter and Gardner Sts. and the Boston & Albany Division tracks. It will be 225 × 225 ft., with the foundry part of one story, and the supply rooms on the railroad side, of two stories, with an elevator tower. It will be of mill construction. The cost will be about $45,000. The machine shop will be at the rear of the present foundry and between the two present machine shops, on the railroad side. It will be four stories, of brick, with heavy mill construction. It will be 184 × 54 ft. Charles H. Hutchins is Pres.; Arthur M. Stone is Treas.

PROVIDENCE, R. I.—Plans have been completed by William R. Walker & Son, 17, Custom House, Providence, for a 2-story factory for the Charles S. Turner Co.

BATAVIA, N. Y.—We are officially advised that the Johnston Harvester Co., of Batavia, has awarded contract to CHARLES A. ALEXANDER, 17 Madison St., Rochester, N. Y., for constructing a 2-story reinforced-concrete blacksmith shop, 175 × 80 ft. The building will replace an old one from which machinery will be removed.

NIAGARA FALLS, N. Y.—The New York Central & Hudson River R. R. Co., New York, is having plans prepared and will soon call for bids for addition to roundhouse, new freight house and other yard improvements in connection with repair shops, at Niagara Falls. J. P. Deems is Gen. Supt. of Motive Power, New York.

ROCHESTER, N. Y.—F. A. Brockett, Arch., Cutler Bldg., has let mason and carpenter contract to the J. B. PIKE-GORSLINE & SWAN CONSTRUCTION CO. for factory buildings for the Cutler Mfg. Co. to be erected on Anderson Ave. One building, which will contain the offices and drafting room, will be of brick and mill construction two stories high, and the building of the main plant will be of the same material and one story high. This building will be 128 × 126 ft. In the rear there will be a boiler plant 25 × 29 ft. Cost, $24,000.

OHIOPYLE, PA.—A factory for the manufacture of a smokeless powder for use in mines and stone quarries is to be erected shortly along the Baltimore & Ohio R. R. at Salt Spring Bottom, between Ohiopyle and Confluence. The Pittsburg Fulmenite Co. is interested.

ERIE, PA.—The erection of an additional digester at the Hammermill Paper Co., on East Lake Rd., is to be started soon. This will necessitate the expenditure of between $30,000 and $40,000.

STEELTON, PA.—Plans are being prepared by C. H. Lloyd, Arch., 206 Market St., Harrisburg, Pa., for a 4-story brick cigar factory for the United Cigar Co., Steelton.

BRADFORD, PA.—E. F. Brickell & Son are preparing plans for a brick factory, 40 x 100 ft., to be erected for the Bradford Trades Supply Co., L. Langworthy, Mgr.

READING, PA.—Plans have been prepared for a building to be erected for the Deepen Brewing Co. It is stated that $150,000 of bonds will be issued for the purpose.

PHILADELPHIA, PA.—Permit has been granted and work will be started at once by John J. Fein & Co., Inc., on an large addition to the pork packing plant at 4150 Germantown Ave. The addition, which will cost about $9,000, will be three stories high, of brick, and will measure 32 x 48 ft.

POTTSVILLE, PA.—A syndicate headed by H. J. Miller, of Port Carbon, Pa., has purchased a tract of ground along the Schuylkill River from south of Pottsville, upon which a textile plant will be erected. The machinery to be installed will cost $25,000 and the entire plant will represent an investment of $100,000.

WASHINGTON, D. C.—W. H. McCRAY, Bond Bldg., Washington, D. C., has the contract for remodeling addition to bakery at Washington Barracks, D. C., at the following prices: Construction, $9,763; plumbing, $750; heating, $1,595; gas piping, $50; electric wiring, $221; fixtures, $145.

ATLANTA, GA.—The Gibbs Gas Engine Co., 410-11 Peters Bldg., has been organized to manufacture gas and gasoline engines of marine, automobile, electric-lighting and general power types; also probably automobiles and motor boats. Plans for plant have not been completed. C. M. Giddings, Rockford, Ill., is Engr.-in-Charge; Charlton G. Ogburn and G. R. Solomon are Mgrs.

KEY WEST, FLA.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., is having plans prepared for a shop building to be erected at the Naval Station, Key West, about 65 x 180 ft., with 30-ft. central longitudinal space, served by a traveling crane, and with mezzanine floors along the sides; foundations will be concrete and piles; steel frame, and ends and roof of expanded metal plastered. Plans are being prepared also for a storehouse building at the same naval station, 54 x 112 ft.; two stories, with two mezzanine floors; floors of concrete and piles; floors and floor beams of reinforced concrete, fireproofed steel girders, structural steel and concrete columns, concrete block walls, steel roof trusses and tile roof. R. C. Hollyday is Ch. of Bureau.

NEW ORLEANS, LA.—H. L. McLean, Perrin Bldg., New Orleans, La., and Bert Carlsen, 1732 Terpsichore St., New Orleans, are planning to establish a mill for the production of rope from flax. Their proposition includes the development of swamp lands for growing flax to be used in manufacturing rope. A company with a capital of $50,000 will be formed.

LOUISVILLE, KY.—Emile Glaser, Arch., Cincinnati, Ohio, has been commissioned to prepare plans for a $75,000 brewery building, to be erected at Louisville, for the John F. Oertel Brewing Co., whose building was recently destroyed by fire.

SALEM, OHIO.—The National Sanitary Co., recently incorporated with a capitalization of $200,000, has purchased 20 acres of land at Salem, on which it will erect a plant for the manufacture of a complete line of bathtubs, lavatories and other enameled ware, it is stated. Ground has been broken for two 100 x 450 ft. main buildings, to be of concrete block construction. The boiler equipment will consist of 400 HP. tubular type and the generating equipment of three 4-valve Russell automatic engines, direct connected to Northern generators. The plant will consist of a foundry, chipping, enameling and shipping departments, in which all of the machinery will be driven by Northern electric motors. The foundry will have a capacity for melting 35 tons per day.

CINCINNATI, OHIO.—The M. MARCUS BUILDING CO., 1513 Plum St., Cincinnati, has been awarded contract to construct a casting building for the White Eagle Lead Works, to be built adjoining the Cincinnati, Lebanon & Northern Ry. It will have two stories, and will be built of brick and concrete, 32 x 138 ft.

FAIRMONT, IND.—Aloin B. Scott will ask for bids soon for construction of a bottle factory and machine shop.

ELWOOD, IND.—William B. Hobbs proposes to erect and equip a factory plant for manufacturing mittens.

EVANSVILLE, IND.—William Davidson & Sons are asking for bids for the construction and equipment of a plow factory.

Harris & Shepbell, Archs., The Rookery, Evansville, will prepare plans for a stoneyard to cost $100,000 and to be located at Fourth and Vince Sts. Benjamin Bosse, A. F. Karges and others are interested.

MUNCIE, IND.—The Nutting Roe Electric Co., recently incorporated, will establish and equip a plant to manufacture electrical equipment of all kinds. K. E. Nutting & M. L. Roe are Dirs.

WEST BADEN, IND.—The Ballard Milling & Elevator Co. has incorporated to build a flour mill and grain elevator. Edward Ballard is Pres.

GREENTOWN, IND.—The grist mill belonging to Holiday & Son, which was recently destroyed by fire, will be rebuilt.

OWOSSO, MICH.—Plans are being prepared by G. M. Edwards, Arch., Flint, Mich., for an addition to the factory of the Owosso Mfg. Co. Estimated cost, $16,000.

DETROIT, MICH.—Max Braudy & Sons, proprietors of the Michigan Iron & Metal Co., at Grand Rapids, will establish a branch in Detroit. The company has purchased 13 acres of ground extending north from Michigan Ave., and have begun to put in sidetracks preparatory to the erection of buildings. The company deals in sawmill machinery, iron culverts, Babbit metal, tanned leather belting, metals and rails.

MILWAUKEE, WIS.—The Molitor Paper Co. is having plans prepared by O. C. Uehling, Wells Bldg., Milwaukee, for a paper factory to cost $50,000.

COUNCIL BLUFFS, IOWA.—C. A. Ralston & Co., of Chicago, Ill., will erect railroad car repair shops costing $300,000, at Council Bluffs.

MASON CITY, IOWA.—Arthur R. Durkee & Co., Archs., Manhattan Bldg., Chicago, Ill., have made preliminary plans for alterations and additions to packing plant of Jos. Decker & Sons, Mason City.

WEBB CITY, MO.—J. E. Shafer and associates will establish a plant to manufacture well-drill rigs and tools. The company will erect a 1-story brick and cement building, 50 x 125 ft., to cost $5,000; cost of machinery, $10,000. J. E. Shafer and R. J. Danford are managing officers.

ST. LOUIS, MO.—The St. Louis Embroidery Co., 801 Washington Ave., will receive bids soon for a 2-story factory building to cost $15,000.

VERSAILLES, MO.—The Iowa-Missouri Clay Products Co., recently incorporated, will erect brick kilns to cost about $25,000; cost of machinery, about $30,000. The company will manufacture fire-brick and fireclay products, pottery-ware, insulators and spark plugs. Harlan A. Young is interested.

TULSA, OKLA.—The Oklahoma Iron Works, James Sloan, Mgr., has increased its capital stock from $25,000 to $100,000, and will erect a building to contain offices, storeroom and drafting and pattern department of reinforced concrete, 28 x 100 ft.

DENVER, COLO.—The Moffat Road Lumber & Mercantile Co. will erect a $100,000 sash and door factory. Frank S. Snell is Mgr.

LOS ANGELES, CAL.—On April 27 the Board of Public Works contracts for machinery for aqueduct cement mill, aggregating about $25,000, were awarded. Largest was to WEBSTER MFG. CO., for $23,445, and several smaller ones to BAKER IRON WORKS, 932 Buena Vista St.

TORONTO, ONT.—The Blackwell Varnish Works Co. proposes to erect a brick factory, 40 x 100 ft., on Wallace Ave. Estimated cost, $40,000.

FORT WILLIAM, ONT.—The Grand Trunk Pacific Ry Co. is having plans prepared by John S. Metcalfe, 184 La Salle St., Chicago, Ill., for an elevator to be erected at Fort William, Ont. The elevator will have a capacity of 2,000,000 bushels.

BROCKVILLE, ONT.—W. H. WOOD, Brockville, Ont., has been awarded the contract for the erection of an addition, 200 x 60 ft., to the plant of the James Smart Mfg. Co., Brockville.

BARRIE, ONT.—Car shops will be erected at Barrie by the Grand Trunk Ry. System, W. D. Robb, Montreal, Que., Supt. of Motive Power.

ST. BONIFACE, MAN.—We are officially advised that Northwood, Noffke & Chickers, Archs., Northern Bank Bldg., Winnipeg, Man., have let contract to ROBERT WATSON, McIntyre Block, Winnipeg, for the proposed plant to be erected in St. Boniface for the Manitoba Linseed Oil Mills Co., of Winnipeg, to cost $20,000; equipment, $30,000. Contracts for heating and storage plants have not been awarded.

WEYBURN, SASK.—The Western Fire-Clay Products, Ltd., will erect a plant here which, with equipment, will cost $250,000.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

DITCHES.—Houston, Tex.—Bids received by John B. Ashe, County Audr., on April 14, for completion of the Medberry ditch were rejected.

COAL-CONVEYING APPARATUS.—West Point, N. Y.—Bids are asked by the Quartermaster, West Point, until noon, May 12, for coal-conveying apparatus.

ROOT HOUSE.—Fort Meade, S. Dak.—Bids are asked until 10 a. m., May 20, by Capt. L. C. Scherer, Q. M., for constructing one concrete root house reinforced with steel.

DITCH.—Eldora, Iowa.—Bids are asked until June 1 by R. A. Vigars, County Audr., for constructing a ditch and drain in Drainage District No. 1, Clay and Jackson Townships.

DEEPENING RIVER.—Lewes, Del.—The contract for the deepening of the Lewes River was awarded to the RICKARDS DREDGING CO., Real Estate Trust Bldg., Philadelphia, at $5,580.

WHARF.—Portland, Me.—Bids are asked until 3 p. m., June 1, by Capt. F. J. Morrow, Q. M., U. S. A., Portland, for constructing wharf and road at Fort Lyon, Cow Island, Portland Harbor.

DRAIN.—Fort Dodge, Iowa.—Bids are asked by J. L. Hanrahan, County Audr., until June 10 for constructing a tile drain, Ditch 51, in Gowrie Township. A. O. Anderson, of Lake City, Iowa, is Engr.

MASONRY WALL.—New York, N. Y.—Bids are asked by the Department of Parks, until 3 p. m., May 21, to construct a rustic masonry boundary wall around Sunset Park, Boro. of Brooklyn.

WHARF REPAIRS.—Newport, R. I.—Bids are asked until 10 a. m., June 1, by Capt. Willis C. Metcalf, Q. M., U. S. A., 209 Thames St, Newport, for repairs to stone wharf at Fort Rodman, Mass.

*DREDGING.—Charleston, S. C.—Bids are asked until noon, June 1, by Jos. T. Davidson, Q. M., Fort Moultrie, S. C., for dredging channel from quartermaster's wharf at Fort Moultrie, S. C., to Charleston Harbor.

REPAIRING CRUISER.—San Francisco, Cal.—Contract has been awarded to the MOORE & SCOTT IRON WORKS, Main and Howard Sts., San Francisco, for repairing the Peruvian cruiser "Almirante Grau."

*LIGHT-HOUSE.—New London, Conn.—Bids are asked by the Light-House Engineer, Tompkinsville, N. Y., until 1 p. m., June 4, for constructing the proposed Southwest Ledge Light-house, New London Harbor.

AIR COMPRESSOR.—Philadelphia, Pa.—A. V. Kaiser & Co., 739 Drexel Bldg., Philadelphia, are in the market for an air compressor to furnish approximately 4,000 cu. ft. air at 30 to 50 lbs. pressure; steam pressure, 110 lbs.

TREATED LUMBER.—New Orleans, La.—Bids are asked by the Board of Commissioners of the Port of New Orleans until June 9 for furnishing treated lumber and piling for wharf construction work for the next twelve months.

GRAIN ELEVATOR.—Baltimore, Md.—A grain elevator will be built at the Mount Clare yards for the Baltimore & Ohio R. R. Co. by JARVIS STEWART & CO., of Chicago, who have been awarded the contract. Estimated cost, $250,000.

LEVEE.—Brawley, Cal.—The California Development Co. has let contract to ROBERT SHERER CO., of Los Angeles, to construct a 5-ft. levee around lower end of Volcano Lake, to protect Imperial Valley. Work will cost about $100,000.

FIRE HOSE, ENGINE.—Vancouver, B. C.—Bids are asked by W. McQueen, City Clerk, until 4 p. m., May 14, for 5,000 ft. of 2½-in. fire hose and one 800-gallon steam fire engine fitted with rubber tires. Deposit 5%. Prices bid must be f. o. b., Vancouver, B. C.

DRAINAGE DITCHES.—Fort Meade, S. Dak.—Bids were received on April 10 by Capt. L. C. Scherer, Constr. Q. M., U. S. A., for constructing drainage ditches, bridges, culverts, etc. Contract has been awarded to GRAMS & SCHUMMER, Sturgis, S. Dak., at $4,134.

WHARF.—Fort Wetherill, R. I.—Bids were received on May 2 by Capt. Willis C. Metcalf, Q. M., U. S. A., Newport, for the construction of an addition to the wharf at Fort Wetherill. Lowest bidder was Roy H. Beattie, 57 North Main St., Fall River, Mass., at $36,220.

WHARVES.—New Orleans, La.—The Dock Board has been granted authority by the Orleans Levee Board to let contract for building about 4,000 ft. of timber wharf between Napoleon Ave. and Valmont St. Estimated cost, $300,000. Hugh McCloskey is Pres. Dock Board.

DITCH.—Redwood Falls, Minn.—Bids are asked until May 12 at the office of L. P. Larson, County Audr., for constructing Ditch No. 10, requiring about 54,336 ft. 6-in., 33,129 ft. 8-in., 34,710 ft. 10-in., 16,927 ft. 12-in. and 1,903 ft. 15-in. tile. Total estimated cost, $35,042.

CONCRETE WALL.—Chicago, Ill.—Bids are asked by the Special Park Commission until noon, May 11, for the construction of a concrete retaining wall at the municipal playground, situated on West 22d St., between Robey St. and Hoyne Ave. A. W. O'Neill, Secy.

STEEL STEAMERS.—Washington, D. C.—Bids are asked until 2 p. m., May 23, by the Quartermaster General, U. S. A., for the construction and complete equipment of one or two single screw steel steamers for the Seacoast Artillery Service. Length, 98 ft.; breadth, 22 ft.; depth, 11 ft. 4 ins.

MONO-RAIL COASTER.—Brooklyn, N. Y.—The Boyce Mono-Rail Coaster Co., 22 Boerum Pl., Brooklyn, has been incorporated, with a capital of $25,000, with the intention of shortly increasing the capital to $200,000. L. W. Horne & Co., 150 Nassau St., New York, are Consult. Engrs. Noted on April 23.

*LOCK-GATE HOUSE.—Boston, Mass.—Bids are asked by the Charles River Basin Commission, 367 Boylston St., Boston, until 2.30 p. m., June 1, for constructing the lower lock-gate house, which is to be built over the lower gate recess at the lock in the Charles River Dam. Hiram A. Miller is Ch. Engr.

*DREDGING DOCKS.—Chicago, Ill.—Bids are asked until May 27 by the Sanitary District of Chicago, American Trust & Savings Bldg., for excavating certain premises adjacent to the Chicago River and the main channel of the Sanitary District, and for building docks. Work is comprised in Division 1 to 7, inclusive. I. J. Bryan, Clerk.

CEMENT.—Winnipeg, Man.—Bids were received by the Chairman of the Board of Civic Control on April 7 for the supply of from 15,000 to 20,000 bbls. of cement. H. N. Ruttan is City Engr. Contract has been awarded to the SUPERIOR PORTLAND CEMENT CO., Orangeville, Ont., at $2.45 per 350 lbs., f. o. b. Winnipeg.

BARGE CANAL.—Albany, N. Y.—F. C. Stevens, Supt. Public Works, has awarded Contract No. 45, Barge Canal, to SCOTT BROTHERS, 122 Jones Ave., Atlanta, Ga., at $467,513. This contract is for the construction of a dam at Caughdenoy and of Lock No. 24 at Baldwinsville. (Itemized bid is given in this issue under Contract Prices).

FIRE ALARM SYSTEM.—Montreal, Que.—Bids were received on April 16 by L. O. David, City Clerk, for the installation of a new fire alarm system in this city, as follows: Star Electric Co., Binghamton, N. Y., $51,700; GAMEWELL FIRE ALARM TELEGRAPH CO., 19 Barclay St., New York City, $53,000 (awarded contract).

MONUMENT.—Washington, D. C.—Bids were received as follows by Maj. M. G. Saliński, Q. M., U. S. A., Washington, on April 25, for constructing granite monument on Crab Island, Lake Champlain, New York: Kyle Granite Co., Washington, D. C., $7,000; time, eight months. John Crawford & Son, Inc., Buffalo, N. Y., $7,000; time, Dec. 1, 1908. Murray Contracting Co., New York City, $6,500; time, 90 days. Van Amering Granite Co., Boston, Mass., three designs, $7,000 each; time, six months.

BULKHEAD.—Santa Monica, Cal.—The Ocean Park Trustees have let the contract to the ATLANTIC, GULF & PACIFIC CO., San Francisco, for the construction of a bulkhead along the ocean front at Short Line Beach, for the protection of the frontage property against the inroads of the ocean. The contract price is $11.33 a lin. ft.; total cost, $14,661.

JETTIES.—New Orleans, La.—Bids were received by the Board of Control New Basin Canal and Shell Road on April 24 for jetties to be built at lake end of canal at West End. Plans prepared by Arsene Perrilliat, State Engr. Contract was awarded to W. F. CAREY & BRO., of New Orleans, at $90.92 per lin. ft. in the construction and 85 cts. per cu. yd. for excavating.

BALLOON.—Washington, D. C.—Bids were opened as follows April 29, by the Chief of the Signal Corps, War Dept., Washington, for (a) one balloon, capacity, 1,000 cu. meters; and (b) one balloon, capacity, 540 cu. meters: Lee Stevens, New York, (a) $3,750; (b) $2,300. Thomas S. Baldwin, Frankfort, N. Y., (a) $3,030; (b) $2,200. Carl E. Meyers, New York, (a) $7,370; (b) $4,510.

WHARF.—Fort Totten, N. Y.—Bids were received as follows on April 29 by Lieut. Chas. A. Clark, C. A. C. Q. M., Fort Totten, for constructing an addition to wharf at this post: John D. Walsh, 397 Hancock St., Brooklyn, N. Y., $4,877; N. J. Foundry & Machine Co., 90 West St., New York, $5,532; John O'Connor, 154 Nassau St., New York, $3,945; George Humphreys, 575 Clinton St., Brooklyn, N. Y., $5,465.

DRY-DOCK.—Bremerton, Wash.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., is having specifications printed for a new dry-dock at the Puget Sound Navy Yard, Bremerton, Wash., the limit of cost being $2,000,000. An advertisement probably will appear in about a month, inviting proposals. The general description and dimensions of the work are on file at office of the Construction News Department, Engineering News, New York.

DITCHES.—St. Paul, Minn.—Bids were received by the State Drainage Board, S. G. Iverson, St. Paul, City Secy., on May 1, for the construction of Rush River Ditch in Nicollet and Sibley Counties. Cost, $160,000. The State Drainage Board opened bids at the same time for constructing Judicial Ditch No. 1 in Steele and Waseca Counties, the approximate cost of which is $52,300. The only bid received was that of D. M. Falconer, Aitkin, Minn., at 14 cts. per cu. yd.

TELEPHONES.—Washington, D. C.—Bids were received as follows on April 27 by the Chief Signal Officer, U. S. A., for furnishing (a) 125 field artillery telephones; (b) 100 field telephones: The Dean Electric Co., Elyria, Ohio, (a) $20, (b) $20; Sterling Electric Co., Lafayette, Ind., (a) $25, (b) $32; Western Electric Co., 463 West St., New York City, (a) $22, (b) $29; Holtzer-Cabott Electric Co., Brookline, Mass., (a) $23.45, (b) $28.50; American Electric Telephone Co., Chicago, Ill., (a) $19.75, (b) $16.75.

*DREDGING.—Boston, Mass.—Bids were received as follows on April 30 by Lt.-Col. Edward Burr, Corps Engrs., U. S. A., for dredging Dorchester Bay and Neponset River, Mass.—(a) dredging, per cu. yd., scow measurement; (b) boulders, weighing three tons or more each, per cu. yd.: Bay State Dredging Co., Boston, Mass. (a) 22.7 cts., (b) $10; Maritime Dredging Co., New York, N. Y., (a) 25 cts., (b) $15; Morris & Cumings Dredging Co., New York, N. Y., (a) 29.7 cts., (b) $15; Chas. M. Cole, Fall River, Mass., (a) 17 cts., (b) $8.

DRYDOCK.—Portland, Ore.—Plans are completed by the Oregon Drydock Co., recently incorporated by W. H. Corbett, W. C. Alvord, W. L. Brewster and Alvin Boody, for building a floating drydock on the west side of the Willamette River adjoining the plant of the Willamette Iron & Steel Works. The construction of the dock will start early in June and it will be completed and ready for operation three or four months later. It will be capable of accommodating vessels of 3,500 tons net register and under. Estimated cost, $100,000.

FIRE HOSE.—New York, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 a. m., May 14, for furnishing the following hose: (For Boro. of Manhattan)—(1) 3,500 ft. of 3-in. rubber fire hose; (2) 26,000 ft. of 2½-in. rubber fire hose; (3) 5,000 ft. of 1½-in. rubber fire hose; (4) 1,500 ft. of 3-in. cotton fire hose; (5) 9,000 ft. of 2½-in. cotton fire hose. (For Boro. Brooklyn)—(1) 7,500 ft. of 3-in. rubber fire hose; (2) 25,000 ft. of 2½-in. rubber fire hose; (3) 5,000 ft. of 1½-in. rubber fire hose; (4) 2,500 ft. of 3-in. cotton fire hose; (5) 10,000 ft. of 2½-in. cotton fire hose.

PIERS.—San Diego, Cal.—The San Diego & Arizona R. R. Co. has been granted authority to build two piers in San Diego Harbor. Estimated cost, $300,000. The eastern pier, which is to be completed first, will have a length along its easterly line of 1,482 ft. and on the west of 1,604 ft., by a width of 525 ft. The western pier will be 525 ft. wide, 1,674 ft. in length on the east side and 1,778 ft. on the west. The slip between the two will be 300 ft. wide and will have a depth of 30 ft. at low tide. Wm. Clayton, Union Bldg., San Diego, is Vice-Pres.; E. J. Kalright is Ch. Engr.

DREDGING.—Ottawa, Ont.—Bids are asked by Fred Gelinas, Secy. Dept. Public Works, Ottawa, until May 15 for dredging required at the following places in the Province of Ontario: Burlington, Blind River, Beaverton, Collingwood, Coburg, Goderich, Hamilton, Kincardine, Little Current, Midland, Meaford, Owen Sound, Nigger and Telegraph Islands, Point Edward, Penetanguishene, Port Burwell, Port Elgin, Picton, Rondeau, Summerstown, Thames River, Toronto, Thornbury, Trenton Harbor and Dark Channel, Waubaushene, Wiarton and Wingfield Basin.

PILES.—Washington, D. C.—Bids were received as follows by Maj. Spencer Crosby, Corps Engrs., U. S. A., on April 24 for delivering piles at the inlet to the tidal reservoir, Washington, D. C., for driving piles: Wil-

bur F. Davis, Kilmarnock, Va., 8.75 cts. per ft.; Culpeper & Co., Baltimore, Md., 13.7 cts. per ft.; Charles K. Nichols, New York City, 11.75 cts. per ft.; N. C. Davis, Springman, Va., 9 cts. per ft.; Crocket Lumber & Pile Co., Norfolk, Va., 9 cts., for driving, 8 cts.; Penn Bridge Co., Washington, D. C., 10.98 cts. per ft., driving piles, 6.44 cts.; Carter & Clark, Washington, D. C., 10 cts. and 9 cts. per ft., for driving, 6 cts and 5.25 cts.; Robert McDermott, Washington, D. C., 9.25 and 8.50 cts., for driving, 6 cts.; George R. Johnson, Baltimore, Md., 9⅝ cts.; Alsop & Pierce, Newport News, Va., 12 cts. per ft., driving, 13 cts and 11 cts.; McLean Contracting Co., Baltimore, Md., 9 cts., for driving, 14 cts.

*PIER, DREDGING.—Milwaukee, Wis.—Bids were received by Maj. W. V. Judson, Corps Engrs., U. S. A., on April 29, for building pile pier, removing old pier and dredging at Waukegan Harbor, Ill., as follows: (A) Grelling Bros., Green Bay, Wis.; (B) Great Lakes Dredge & Dock Co., Chicago; (C) Adolph Green, Green Bay, Wis.; Driving round piles, furnished by the U. S., 13,400 lin. ft., per lin. ft., (A) 19½ cts., (B) 22 cts., (C) 18 cts.; making and driving sheet piles, plank furnished by the U. S., 285,000 ft. B. M., per M. ft. B. M., (A) $19.50, (B) $20, (C) $19.25; framing timber and plank furnished by U. S. for pile pier, 150,000 ft. B. M., per M. ft. B. M., (A) $21.50, (B) $32, (C) $24.50; 2,500 tons stone, per ton of 2,000 lbs., (A) $1.75, (B) $1.70, (C) $1.68; removing part of old pier, 520 lin. ft., per lin. ft., (A) $22, (B) $24, (C) $14.60; dredging 20,000 cu. yds., per cu. yd., (A) 30 cts., (B) 29 cts., (C) 28 cts. Total, (A) $35,210, (B) $35,978, (C) $28,965. Contract awarded to ADOLPH GREEN.

STEAMSHIP.—Washington, D. C.—Bids were opened as follows April 30, at the office of the Quarter-Master General, U. S. A., Washington, D. C., for the construction of (a) one mine-laying vessel, and (b) one cable-laying vessel for the U. S. Army: United Engineering Works, San Francisco, (a) $183,000, April 30, 1909; Fore River Shipbuilding and Engine Co., Quincy, Mass., (a) $174,000, April 10; (b) $204,250, May 1; both, $373,000; Maryland Steel Co., Sparrow's Point, Md., (a) $184,700, March 9; (b) $213,000, April 5; Pusey & Jones Corporation, Wilmington Del., (a) $161,794, March 15; (b) $205,000, March 15; Gas Engine & Power Co., and C. L. Seabury Co., Morris Heights, N. Y., (a) $185,000, March 30; (b) $229,000, April 15; Union Iron Works, San Francisco, Cal., (a) $174,000, March 1; Newport News Shipbuilding & Dry Dock Co., Newport News, Va., (a) $171,000, Feb. 10; (b) $194,000, Feb. 10; New York Shipbuilding Co., Camden, N. J., (a) $168,000, March 1; (b) $194,000, March 1; Bath Iron Works, Bath, Me., (b) $220,000, April 1; Cramp Shipbuilding & Engine Works, Philadelphia, Pa., (a) $167,500, Feb. 1; (b) $203,500, Feb. 1. Conditional bids, (a) $163,000; (b) $199,200. Vessel (a) is to be used on the Pacific Coast; vessel (b) on the Atlantic Coast.

*MONUMENT.—Charleston, S. C.—Bids were received as follows on April 23, by Capt. E. T. Stuart, Corps. Engrs., U. S. A., for furnishing materials and constructing monument on Kings Mountain battlefield, York County, S. C.: (A) height proposed for $25,000; (B) material, and quarry; (C) excess excavation, per cu. yd.; (D) excess concrete, per cu. yd.; (E) time for completing: B. C. Bye Granite Co., Rion, S. C., (A) 103'; (B) granite, Winnsboro granite quarry; (C) $1.10; (D) $10; (E) twelve months. The Southern Marble & Granite Co., Spartanburg, S. C., (A) 115'-3"; (B) granite, Mt. Airy, N. C., quarry or marble, the Georgia marble quarry, Tate Ga.; (C) $3.30; (D) $9; (E) eight months; granite recommended for acceptance). General Contract Co., New Orleans, La., (Letter), (A) 83'; (B) granite, Stone Mountain quarry, Ga.; Bedford stone; (C) $6.50; (D) $15; (E) five months. Yorkville Monument Works, Yorkville, S. C., (A) 107'; (B) granite, Whitesides K. M. quarry or Heath Springs, S. C.; (C) $1.50; (D) $15; (E) twelve months. The Norcross Bros. Co., Worcester, Mass., (A) 118'-6"; (B) marble, Southern Marble Co. quarry or (A) 101'; (B) granite the Troy white granite quarry; (C) $2; (D) $6.50; (E) five months. Childs & Edwards, Chester, S. C., (A) 100'; (B) marble, the Georgia Marble Co., quarry; (C) $2; (D) $12; (E) five months. The Van Amringe Granite Co., Boston, Mass., (A) 110'; (B) granite, Winnsboro granite quarry; (C) $1; (D) $8.50; (E) seven months. Wells Granite Co., Redan, Ga., (A) 88'; (B) granite, Redan, Ga., quarry; (C) $7.50; (D) $10.50; (E) twelve months.

*DREDGING.—Detroit, Mich.—Bids were received as follows by Lieut.-Col. C. McD. Townsend, Corps Engrs., U. S. A., on April 17 for dredging Hay Lake and Neebish Channels, St. Marys River, Mich. Section 1, Item M, Hay Lake, (A) 360,000 cu. yds. full rate; (B) 206,000 cu. yds. half rate. Section 2, Item N, Middle Neebish Dike, (C) 183,000 cu. yds., full rate; (D) 86,000 cu. yds., half rate. Section 3, Item Q, Little Mud Lake, (E) 295,000 cu. yds., full rate; (F) 197,000 cu. yds., half rate. Section 4, Item R, Sailors Encampment, (G) 69,700 cu. yds., full rate; (H) 43,000 cu. yds., half rate: Chas. Simon, Two Rivers, Wis., (A) 17.7 cts., (B) $81,951; Great Lakes Dredge & Dock Co., Chicago, Ill., (A) 19.9 cts., (B) $92,137, (C) $2.60, (D) $587,600, (E) 49.5 cts., (F) $194,782, (G) $4.25, (H) $349,350; Zenith Dredging Co., Duluth, Minn., (A) 27.5 cts., (B) $127,325 (E) 44.5 cts., (F) $175,107; Edward Bros., Sault Ste. Marie, Mich., (A) 21 cts., (B) $97,230, (C) $2.67, (D) $603,420, (E) 45.5 cts., (F) $179,042 (G) $3.95, (H) $324,090; Greiling Bros., Green Bay, Wis., (A) 19 cts., (B) $87,970; Breyman Bros., Toledo, Ohio, (A) 21 cts., (B) $97,230, (C) $3.05, (D) $689,300, (E) 60 cts., (F) $236,100, (G) $4.08, (H) $335,376; The Lake Erie Dredging Co., Buffalo, N. Y., (A) 21.5 cts., (B) $99,545, (C) $2.80, (D) $632,800; Samuel O. Dixon, Milwaukee, Wis., (A) 21.75 cts., (B) $100,702; Duluth-Superior Dredging Co., Duluth, Minn., (A) 25 cts., (B) $115,750, (E) 46 cts., (F) $181,010; Fitz Simons & Connell Co., Chicago, Ill., (C) $2.75, (D) $621,500, (E) 49 cts., (F) $192,815; Hickler Bros., Sault Ste Marie, Mich., (C) $2.65, (D) $598,900; Standard Contracting Co., Cleveland, Ohio, (A) 30 cts., (B) $138,900, (C) $3.40, (D) $768,400, (E) 55 cts., (F) $216,425, (G) $4.90, (H) $402,780.

CONTRACT PRICES.

[Where * precedes items under Contract Prices the work was advertised in Engineering News.]

BARGE CANAL.—Albany, N. Y.—One bid was received on April 21 by F. C. Stevens, Supt. of Public Works, for Contract No. 45, Barge Canal, which is for the construction of a dam in the Oneida River at Caughdenoy and of Lock No. 24 and appertaining structures at Baldwinsville. It was submitted by SCOTT BROS., 122 Jones Ave., Atlanta, Ga., who were awarded the contract. Itemized prices and engineer's estimate were as follows—(A) Engineer's estimate; (B) Scott Bros.:

	(A)	(B)
570 cu. yds. grubbing	$0.30	$0.30
333,400 cu. yds. excavation	.35	.42
120 M. ft. B. M. sheeting and bracing, per M	40.00	40.00
52,700 cu. yds. forming embankment	.15	.15
1,200 cu. yds. lining	1.50	1.50
6.2 M. ft. B. M. sawed lumber (yellow pine or Douglas fir), per M	50.00	50.00
12 M. ft. B. M. sawed lumber in needles, per M	100.00	100.00
248 M. ft. B. M. sawed lumber (hemlock), per M	40.00	40.00
47.6 M. ft. B. M. white oak lumber, per M	80.00	80.00
2,850 lin. ft. round timber in cribs	.15	.15
3,200 cu. yds. stone filling in cribs	1.50	1.50
3,700 lin. ft. foundation piles	.25	.27½
50.2 M. ft. B. M. wooden sheet piling, per M	50.00	50.00
4 cu. yds. first-class concrete	7.00	8.00
29,900 cu. yds. second-class concrete	6.30	6.75
270 cu. yds. reinforced concrete	10.00	10.00
5 cu. yds. bridge coping	20.00	20.00
630 cu. yds. wash wall	2.00	2.00
1,430 cu. yds. third-class riprap	2.50	2.50
125 cu. yds. fourth-class riprap	2.00	2.00
3,150 lbs. 3½" cast-iron pipe and specials	.03	.03
300 lbs. 2½" cast-iron pipe and specials	.03	.03
80 lin. ft. 15" vitrified pipe laid	.50	.50
296,500 lbs. structural steel	.05	.05
36,300 lbs. metal reinforcement	.04	.04
12,100 lbs. steel castings	.05	.05
10,500 lbs. iron castings, plain	.03½	.03½
7,000 lbs. iron castings, machined	.06	.06
3,150 sq. ft. Portland cement sidewalks	.15	.15
570 lin. ft. stone curbs	.40	.40
230 sq. yds. cobble stone paving	1.00	1.00
1,450 sq. yds. macadam pavement	.60	.60
330 sq. yds. wood pavement	3.00	3.00
850 lbs. wrought-iron chain	.06	.06
1,290 lin. ft. wrought-iron pipe railing	1.00	1.00
180 lin. ft. lattice railing	1.50	1.50
580 fender fastenings	1.50	1.50
195,000 lbs. metal in lock gates	.06	.06
90,000 lbs. metal in buffer beams	.06	.06
24,000 lbs. metal in lock valves	.12	.12
83,000 lbs. metal in guard gate	.07	.07
80,000 lbs. metal in automatic dam	.07	.07
Cofferdams, pumping, bailing and draining, lump sum	28,100.00	32,600.00
For removing old bridge superstructures, lump sum	200.00	200.00
For maintaining highway traffic, lump sum	500.00	500.00
Deduct price to be paid to the State of New York for buildings in place, which are to be removed by the contractor without expense to the state	10,000.00	9,000.00
Total	$425,124	$467,513

*SEWER SYSTEM.—West Hartford, Conn.—Bids were received on March 31 by the Board of Sewer Commissioners for the construction of the Park St. sewer system. A. B. Alderson is Town Engr. The bids in detail were as follows—(A) HENRY SPINACH, Waterbury, Conn. (awarded contract); (B) Pierson Engineering & Construction Co., Bristol, Conn.; (C) F. B. & W. H. O'Neil, Hartford, Conn.; (D) Hartford Paving & Construction Co., Hartford; (E) John F. Gill Co., Boston, Mass.; (F) Chas. H. Slocomb, Hartford; (G) F. A. Foster, Boston; (H) Ryan, Unmack & Co., New Haven; (I) Leonardo Suzio, Meriden, Conn.; (J) F. H. Cowin Co., Boston; (K) Dolan & Barry, Boston; (L) A. M. Cusack, Boston; (M) Falvey & Kelly, Dorchester, Mass.. (N) Fred. T. Ley, Inc., Springfield, Mass.; (O) John McCourt & Co., Boston:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
1,758 ft. 15" pipe	$1.19	$2.20	$2.60	$1.95	$1.90	$1.80	$1.50	$2.12	$1.80	$1.75	.....	$1.97	$2.35	$2.05	$2.17
6,851 ft. 12" pipe	.92	1.15	1.50	1.25	1.22	1.30	1.30	1.57	1.45	1.25	.....	1.65	1.90	1.85	1.90
1,360 ft. 10" pipe	.81½	1.00	1.42	.89	.90	.90	1.20	1.15	1.20	1.15	.....	1.35	1.30	1.51	1.07½
7,592½ ft. 8" pipe	.69	.85	.70	.78	.82	.80	1.10	.89	1.12	1.10	.....	1.15	1.20	1.32	.99½
3,858 ft. 4" pipe underdrain	.10	.10	.06	.12	.25	.14	.17	.12	.16	.15	.....	.32	.35	.20	.17
49 standard manholes	48.00	50.00	35.00	55.00	50.00	60.00	60.00	50.00	55.00	55.00	.....	50.00	45.00	45.00	50.00
6 drop manholes	75.00	50.00	35.00	80.00	50.00	100.00	65.00	55.00	55.00	100.00	.....	100.00	60.00	45.00	60.00
6,704 ft. 6" tile	.59½	.35	.30	.62	.50	.45	.50	.50	.39	.65	.....	.70	.60	.80	.99
20 ft. 6" tile	.20	.50	.20	1.15	.25	1.00	1.00	.75	1.20	.28	.....	.25	.40	.25	.17
30,000 ft. B. M. lumber	30.00	15.00	25.00	10.00	25.00	25.00	30.00	28.00	40.00	30.00	.....	20.00	20.00	40.00	30.00
150 cu. yds. rock	3.50	3.00	.50	.50	3.00	2.00	4.00	5.00	3.00	6.00	.....	4.50	4.00	3.00	7.50
175 cu. yds. concrete	6.50	6.00	6.50	8.00	6.00	6.00	6.00	7.00	6.50	6.00	.....	6.50	6.00	7.50	5.25
No. working days, at $5 per day	150	250	100	60	150	150	150	125	175	175	.....	150	150	100	250
Total	*$25,235	$28,252	$28,727	$29,017	$29,220	$29,336	$32,185	$32,854	$33,177	$33,518	.....	$37,480	$38,973	$40,431	$40,580
Town furnishing pipe	$19,873	$23,304	$22,600	$22,222	$26,590	$23,460	$23,584	$28,211	$27,435	$29,282	$31,450	$31,538	$32,385	$33,587	$34,344

*Specifications called for first quality pipe, deep and wide sockets in 3-ft. lengths; 15-in. to be double strength.

PAVING.—Albany, N. Y.—The following bids were received by the Board of Contract and Supply on April 20 for the improvement of McCarty Ave., from the west line of South Pearl St. to the east line of Browne St.: (a) Mulderry Bros, Albany; (b) John M. Holler, Albany; (c) Edward F. Dillon, Albany; (d) Michael F. Dollard, Albany. The itemized prices of the bids were:

	(A)	(B)	(C)	(D)
5,210 sq. yds. granite paving	$2.67	$2.56	$2.85	$2.85
110 " driveways	2.20	2.40	2.0[illegible]	2.25
20 " driveways	2.70	3.00	2.8[illegible]	2.00
20 " relaying pavement	.40	1.00	.2[illegible]	.40
2,970 lin. ft. straight curb	.80	.82	.5[illegible]	.75
115 " circular curb	1.40	1.00	1.1[illegible]	1.00
10 " resetting curb	.30	.30	.2[illegible]	.15
5,640 sq. ft. flag sidewalk	.20	.22	.2[illegible]	.20
1,500 " brick sidewalk	.11	.14	.14	.06½
300 " relaying sidewalk	.08	.08	.07	.04
700 cu. yds. excavation	.30	.30	.65	.25
900 " embankment	.12	.20	.25	.20
150 sq. ft. cross-walk	.40	.50	.65	.50
640 lin. ft. 6-in. pipe	.65	.75	.75	.50
40 6-in. bends	.60	.75	.75	.60
40 water services	22.00	22.00	25.00	20.00
2 gutter basins	45.00	40.00	35.00	35.00
4 receiving basins	85.00	85.00	75.00	80.00
Days to complete (at $5)	50.00	50.00	65.00	40.00
	$21,935	$22,125	$24,283	$19,762

INDUSTRIAL NOTES.

THE AMERICAN BANK NOTE CO. has removed to new executive offices, located at 70-72 Broad St., New York City.

THE IOLA PORTLAND CEMENT CO. advises that its sales department has been removed to 815 Commerce Building, Kansas City, Mo.

THE VULCAN STEAM SHOVEL CO., of Toledo, Ohio, is the new name of the Vulcan Iron Works, of that city. The change has been made in view of the fact that steam shovels are the company's specialty, while the old name was somewhat indefinite.

THE POWER & MINING MACHINERY CO., Cudahy, Wis., state that the San Francisco office of the company has been removed from 148 First St. to Room 217 Sheldon Bldg.

THE DISTRICT OFFICE maintained by Allis-Chalmers Co., at San Francisco, in charge of Mr. H. D. Scribner, Manager, has been removed from the Atlas Building to the Phillips Building, 599 Mission St.

WOOD & VAN NEST, 26 Cortlandt St., New York, is a new firm organized to deal in railway supplies and to represent manufacturers of such supplies. Mr. M. F. Wood was formerly General Manager of the Eyeless Pick Tool Co., and Mr. J. A. Van Nest has been connected with the Pennsylvania R. R. for a considerable time.

THE UNION CARBIDE CO. announces that the manufacturing, construction and engineering operations of Union Carbide Co. will hereafter be directed from the New York office of the company, located at 79 Wall St.

THE ADAMS & WESTLAKE CO., Chicago, announces that Mr. Walter Baldwin (formerly Chicago sales manager for the Ledger-wood Mfg. Co.) has been made Assistant General Manager. The company also announces the removal of its New York office to Nos. 1000 to 1003 Hudson Terminal Building, 30 Church St., New York, N. Y.

ON MAY 1 the Dayton Hydraulic Machinery Co., R. E. S. Geare, M. E., Eastern Sales Mgr., moved its New York offices from 133 Liberty St., to Suite 552-555 Fulton Building, Hudson Terminal. The company's scope of manufacture now embraces side suction and double suction volute, multi-stage turbine pumps, as well as the Brooks pump.

THE KEYSTONE DRILLER CO., Beaver Falls, Pa., reports the following sales of the Downie deep well pump: The Town of Gooding, Idaho; Hope Water and Light Plant, Hope, Ark.; Board of Commissions of West Lebanon Township, Pa.; West Virginia Penitentiary, Moundsville, W. Va.; Salvation Army, Springvalley, N. Y.; City of Oronogo, Mo.; Arctic Ice & Storage Co., Mexico. Mo.

THE STANDARD GAGE MFG. CO., of Syracuse, N. Y., maker of indicating gages for all purposes, has moved its New York branch from 141 Broadway to Room 1770 Hudson Terminal Building. This change was made in order to obtain more spacious quarters for the display of a line of engineering specialties. The western branch of the Standard Gage Co. is located in the Monadnock Building, Chicago, Ill.

THE HURLEY-MASON COMPANY, successors to The Contracting Engineering Co., Provident Bldg., Tacoma, and Fenton Bldg., Portland, announces that on account of the confusion caused by the similarity of the name of The Contracting Engineering Co. with that of several others, and the necessity for increasing the capital on account of the rapid growth of the business, the company has reorganized and adopted the above name.

THE ORGANIZATION of the Canadian Crocker-Wheeler Co., Ltd., is announced for the manufacture and sale in Canada of the Crocker-Wheeler electrical apparatus. F. E. Lovell, President of the new company, is a member of the firm of H. Lovell & Sons, of Coaticocke, Que., who have extensive interests in lumber mills and timber limits throughout the Province of Quebec. Russell A. Stinson and F. Jno. Bell, Vice-President and Secretary-Treasurer, respectively, have been identified with the manufacturing, construction, and sales departments of the electrical trade in Canada for the past fifteen years, and are particularly well known in Montreal, where the head office of the company has recently been opened in the Street Railway Chambers, Place d'Armes Hill.

THE GOLDSCHMIDT THERMIT CO. announces the establishment of an office and works at 103 Richmond St., W., Toronto, Canada. The new branch was opened for business on May 1, and is under the management of E. C. Rutherford, of Toronto. Mr. Rutherford was for several years the manager of the Magnano Air Brake Co., and of the Canadian Brake & Supply Co. A complete stock of Thermit and appliances will at all times be carried at Toronto, and the branch organization will be in a position to execute promptly the welding of heavy steel sections, such as stern posts of steamships, crank shafts, etc., as well as trolley rails in paved streets, motor cases, and other broken steel sections. A fully equipped repair shop will be in operation for the repair of steel castings up to one thousand pounds in weight.

THE GENERAL ELECTRIC CO.'S 16th annual report for the year ending Jan. 31, 1908, was made public on May 5. The net profit for the year, after deducting all patent, general and miscellaneous expense, allowances for depreciation and losses and writing off

$3,745,989 from the valuation of factory plants, amounting to $6,586,653, of which $5,183,614 was paid out in dividends and the remainder was carried to the surplus. The sales billed during the year amounted to $70,977,168 and the orders received to $59,901,040. During the year the company's engineers have developed a 1,500-volt direct current railway system, which is now in successful use on two different roads, and other roads are being equipped. The total expenditure on factory plants during the year was $6,350,576. The total floor space in all factories now amounts to 6,400,000 sq. ft. The money obtained by the issue of debentures a year ago still remains in the treasury, it being deemed inadvisable to proceed with the construction of the additional works for which land has been purchased at Erie, Pa., until a revival of business.

THE BROWN-COCHRAN CO., Lorain, Ohio, manufacturers of Brown gas engines, marine engines, and CO-2 refrigerating machinery, has appointed William M. Maxwell General Sales Manager. Mr. Maxwell was formerly the company's manager at Des Moines, Iowa, where he is succeeded by J. C. Compton. J. O. Brown, the President of the Brown-Cochran Co., who has heretofore had charge of the sales department, will in the future devote himself exclusively to the executive affairs of the company. The same staff of assistants will be retained in the sales department. Another change in the company's staff that will be of particular interest to the engineering world, is the appointment of C. I. Longenecker as Chief Engineer. Messrs. Brown and Longenecker are collaborating in the production of a gasoline traction engine and a gasoline hoist, both of which will be placed on the market in the near future.

CIVIL SERVICE EXAMINATIONS.

ENGINEERING INSPECTOR—Albany, N. Y.—The following persons passed the State Civil Service Examination held March 7 for the position of Engineering Inspector (architect) in the State service; salary, $2,250 and expenses:

Elbert W. Tompkins, 36 Cortland Pl., Albany, N. Y., 92.7.
Alexander Thompson, 419 West 31st St., New York, 91.4.
Christian Ashmosen, Kings Park, N. Y., 86.5.
George W. Burroughs, Custodial Asylum, Rome, N. Y., 86.45.
Lewis C. Raynolds, Willard, N. Y., 85.3.
Ross R. Schulte, 747 East 168th St., New York, 84.95.
Edwin B. Higby, 44 Essex St., Rochester, N. Y., 83.05.
John D. Hallock, 286 Buffalo St., Gowanda, N. Y., 82.55.
Robert G. Elliott, Dannemora, N. Y., 80.4.
William Flannery, 159 Congress St., Brooklyn, N. Y., 79.3.
George A. Clark, Box 25, Youngstown, N. Y., 77.75.
Theodore T. Mersereau, 448 56th St., Brooklyn, N. Y., 77.6.
Frank W. Murtagh, 335 South Clinton Ave., Rochester, N. Y., 77.
Hadley W. McCrossen, House of Refuge, Randalls' Island, N. Y., 76.15.
William J. Coffin, 117 South Lake Ave., Albany, N. Y., 75.1.
Andrew J. Haire, Jr., 424 Halsey St., Brooklyn, N. Y., 75.
John K. Wright, 166 Magnolia Ave., Jersey City, N. J., 84.7.

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

FIRE ESCAPES.—E. D. Greene, 330 Main St., Catskill, N. Y., would like catalogs of metal fire escapes suitable for a building constructed about twenty-five years ago.

BUILDING MATERIAL.—Los Angeles, Cal. —The Builders' Guarantee Estimating Co., Grosse Bldg., Los Angeles, desires catalogs pertaining to the various classes of building materials.

CEMENT WATERPROOFING.—Baltimore, Md.—The McCay Engineering Co., 9 East Lexington St., Baltimore, writes us that catalogs and information concerning cement waterproofing are desired.

COAL GAS EQUIPMENT.—Raton, N. Mex. —We are in receipt of advices from the Colfax Engineering Co., Raton, N. Mex., stating that correspondence is desired with manufacturers of coal gas equipment and by-product plants.

CEMENT BLOCKS, ETC.—Cedar Rapids, Iowa.—We are in receipt of advices from De La Hunt & Olmsted, Contractors, Cedar Rapids, stating that they desire catalogs and prices from manufacturers of cement, brick and tile block machinery.

TRADE PUBLICATIONS.

PUMPING PLANT.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin 1610. Paper; 8 × 10½ ins.; pp. 12; illustrated.

The equipment of the Kinnickinnic Flushing Tunnel at Milwaukee, Wis., is described very generally in this pamphlet. This plant was described in Engineering News, Aug. 1, 1907.

INVESTIGATION AND CONSTRUCTION.—The American Engineering Co., Traction Building, Indianapolis, Ind. Paper; 6 × 9 ins.; pp. 8; illustrated.

This is a collection of cartoons and sketches advertising the work of the company in making examinations, surveys and designs, and undertaking construction contracts.

DUST PREVENTION.—Barrett Manufacturing Co., New York. Paper; 9 × 6 ins.; pp. 24; illustrated.

This catalog explains the use and advantages of "tarvia" for preventing dust on macadam roads, and is handsomely illustrated by views showing roads and streets which have been treated by tarvia.

GRADER PLOW.—Disc Grader & Plow Co., Hunter, N. Dak. Paper; 3½ × 6¼ ins.; pp. 8; illustrated.

A rotary disk plow attachment for elevating grader machines is described, as an improvement upon the ordinary share plow. Several testimonials are given from contractors who have used the machine.

LOCOMOTIVE REPAIR PARTS.—Davenport Locomotive Works, Davenport, Iowa. Paper; 9 × 6¼ ins.; pp. 39; illustrated.

In unusually clear cuts each and every part of the locomotive is here shown, with a code number by which orders can be identified. The list should be very useful to all owners of the small work locomotives made by the Davenport company.

STEEL CENTERING FOR CONCRETE.—Blaw Collapsible Steel Centering, Westinghouse Bldg., Pittsburg, Pa. Paper; Catalog No. 10; 6 × 9¼ ins.; pp. 58; illustrated.

The Blaw collapsible steel center is one of the best known of the patented appurtenances to reinforced-concrete construction. In this, the latest catalog, many new uses of the centering are shown.

REINFORCED CONCRETE.—Expanded Metal & Corrugated Bar Co., 925-937 Frisco Bldg., St. Louis, Mo. Paper; 10½ × 8½ ins.; pp. 112; illustrated.

In the 1908 edition of their regular catalog the Expanded Metal Company have a more ambitious pamphlet than ever before. It is made up principally of descriptions of work in which their style of reinforcement has been used. At the end are some tables of sizes and strengths.

CRANES.—The Cleveland Crane & Car Co., Wickliffe, O. Paper; 12¼ × 9½ ins.; pp. 44; illustrated.

In their latest catalog this company illustrates types of all the cranes which they build comprising electric traveling cranes, varying in size from 1 to 100 tons, special gantries, electric hoists and hand-power traveling cranes from 1 to 50 tons capacity. The illustrations are remarkably clear and the typography excellent.

STEEL SHEET PILING.—Carnegie Steel Co., Pittsburg, Pa. Paper; 10 × 8 ins.; pp. 32; illustrated.

The various sizes of piles of the United States and Friestedt types are listed, but the pamphlet consists mainly of half-tone engravings showing the application of the piling at dams, cofferdams, bridge and building foundations, etc. Two views show old wooden piles being burned as worthless, while old steel piles are going to the steel furnace as scrap.

ROAD ROLLERS AND ACCESSORIES.—The Kelly-Springfield Road Roller Co., Springfield, Ohio. Paper; 9 × 6 ins.; pp. 88; illustrated.

A large part of this pamphlet is devoted to specifications for brick, asphaltic concrete, telford and macadam pavements, street signs, artificial stone sidewalks, etc. The specifications are accompanied by cross-sections of various kinds of pavements. A section of the catalog is devoted to the general subject of road rollers. Views of the Kelly-Springfield roller are included.

FLUSH TANK METER.—The Flush Tank Meter Co., Wilkinsburg, Pa. Paper; 3¼ × 6 ins.; pp. 8; illustrated.

This meter is on the orifice principle, but is especially designed to prevent the stoppage of the orifices by sediment. The water, before going to the orifice, passes downward into a short vertical length of pipe, then rises and passes horizontally to and over a baffle plate. The meter was devised by Mr. William Alexander, Superintendent of the Pennsylvania Water Co., Wilkinsburg, Pa. The pamphlet contains the results of some tests of the meters.

GENERATORS AND MOTORS.—The Sprague Electric Co., 531 W. 34th St., New York City. Bulletins. Paper; 9 × 10½ ins.; illustrated.

The mechanical construction of a line of continuous-current, direct-connected generators for lighting and power, known as "Type S" is described in Bulletin No. 107.

Direct-current motors, "Type D," in sizes from 10 to 100 HP. are similarly sketched in Bulletin 224.

Large and small motors for driving ventilating fans and blowers are shown in their many applications in Bulletin 310.

Flexible steel armored hose for steam or compressed air needs little exploitation. However, a few applications given in Bulletin 507 are reminders of its success.

For other Proposal Advertisements see pages 39, 41, 43, 44, 48, of Advertisements and Construction News page 160.

CATSKILL AQUEDUCT.

Sealed bids or proposals will be received by the Board of Water Supply, in the office of the Board, No. 299 Broadway, New York, Room 910, ninth floor, until 11 a. m., on June 2, 1908, for the construction of the Rondout siphon, a deep-pressure tunnel, lined with concrete, 14½ feet in inside diameter and about 23,600 feet long, to be reached through shafts from 370 feet to 710 feet in depth; the northerly half, about 3,340 feet, of the Bonticou tunnel, a tunnel on the hydraulic gradient, 17 feet high and 13 feet 4 inches wide, to be driven without shafts; and two short stretches of plain concrete conduit, known as cut-and-cover aqueduct, one of which is located at each end of the siphon. The tunnel will connect with the cut-and-cover aqueduct by a down-take shaft at the north end, and an up-take shaft at the south end, and between these, near Rondout Creek, there will be a drainage shaft. Besides these, there will be five other shafts for construction purposes, making eight in all.

An approximate statement of the quantities of the kinds of work and further information are given in the information for bidders.

At the above place and time the bids will be publicly opened and read. The award of the contract, if awarded, will be made by the Board as soon thereafter as practicable.

Two or more bonds, the aggregate amount of which shall be eight hundred thousand dollars ($800,000), will be required for the faithful performance of the contract. No bid will be received or deposited unless accompanied by a certified check upon a National or State Bank, drawn to the order of the Comptroller of The City of New York, to the amount of one hundred thousand dollars ($100,000).

Time allowed for the completion of the work is 54 months from the service of notice by the Board to begin work. Pamphlets containing further information for bidders, form of contract, specifications, etc., and pamphlets of contract drawings, can be obtained at Room 1515 at the above address, by depositing the sum of ten dollars ($10.00) for each pamphlet, or twenty dollars ($20.00) for each set, to insure their return in acceptable condition within thirty days from the date upon which bids are to be opened. For further particulars see City Record.

JOHN A. BENSEL,
President;
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.
J. WALDO SMITH,
Chief Engineer.
THOMAS HASSETT,
Secretary. 19-2t

AIR LIFT PUMPING STATION.

Galveston, Tex.

Sealed proposals will be received by the City Commissioners of the City of Galveston, at the office of the City Secretary, until 12 o'clock M., Thursday, May 28, 1908, and opened at the first regular or special City Commissioners' meeting thereafter, for furnishing, delivering and erecting the complete mechanical equipment of an air lift pumping station at Alta Loma, Texas, consisting of:

One (1) 1,200 cu. ft. Air Compressor.
One (1) 700 cu. ft. Air Compressor.
One (1) 200-HP. Water Tube Boiler.

All necessary accessories, including about 16,615 feet of air pipe to wells.

In accordance with specifications on file in the office of the City Engineer of Galveston, and in the office of Harry Pennington, Consulting Engineer, Houston, Tex.

Each proposal must be submitted in duplicate and accompanied by a certified check, payable to the order of the City Secretary of the City of Galveston, in the sum of five per cent. of amount of bid, or the same will not be considered. A bond in the sum of fifty per cent. of the contract price will be required for the faithful performance of the contract; sureties thereon must be satisfactory to the Board of City Commissioners.

The right is reserved to reject any and all bids, and waive technical defects if in the interest of the City.

H. C. LANGE,
Commissioner of Water-Works & Sewerage.
A. T. DICKEY,
City Engineer.
JOHN D. KELLEY,
City Secretary.
19-2t

STONE ROADS.

Elizabeth, N. J.

Proposals are asked for the construction of Macadam Roads, on West Grand Street, First Avenue and Locust Street, in the City of Elizabeth, and in the Boroughs of Roselle and Roselle Park, Union County, N. J., from De Hart Place to Westfield Avenue.

The length of the roadway to be macadamized is about 11,805 lin. ft. The width of the stonework is 16 feet.

The estimated quantities of the items of the work are as follows:

Earth Excavation, 7,620 cu. yds.
8-inch Macadam, 15,020 sq. yds.
4-inch Macadam, 5,850 sq. yds.
Manhole Heads reset, 12.
6-inch Underdrains, 1,200 lin. ft.
Rock Excavation, 0.
Crushed stone furnished additional, 270 tons.

Plans, profiles and specifications for this work may be examined at the office of the County Engineer, 215 Broad Street, Elizabeth, N. J.

Bidders must enclose with their bids a certified check for $1,000.00, made payable to the Director of the Board of Chosen Freeholders as a guarantee that if the contract be awarded to such bidder, the bidder will enter into an agreement with the Board of Freeholders for the carrying out of the work.

Bids for the above-described work will be received by the County Road Committee of the Board of Chosen Freeholders of the County of Union, at the Court House, Elizabeth, N. J., at 2.30 p. m., on Tuesday, May 26, 1908.

The Board of Freeholders or its Committee reserves the right to reject any or all bids, as they may deem best for the interests of the County.

JACOB L. BAUER, County Engineer,
215 Broad Street, Elizabeth, N. J.
19-3t

STONE ROADS.

Elizabeth, N. J.

Proposals are asked for the construction of Macadam Roads, on North Broad Street and Elizabeth Avenue, in the City of Elizabeth and the Township of Union, Union County, N. J., from King Street northerly to a point near the Essex County Line.

The length of the roadway to be macadamized is about 5,060 lineal feet. The widths of the stonework are 16 feet and 23 feet.

The estimated quantities of the items of the work are as follows:

Earth Excavation, 5,550 cu. yds.
8-inch Macadam, 8,178 sq. yds.
12-inch Macadam, 3,246 sq. yds.
6-inch Underdrains, 6,400 lin. ft.
Stone Block Gutters relaid, 425 sq. yds.
Rock Excavation, 0.

Plans, profiles and specifications for this work may be examined at the office of the County Engineer, 215 Broad Street, Elizabeth, N. J.

Bidders must enclose with their bids a certified check for $1,000.00, made payable to the Director of the Board of Chosen Freeholders as a guarantee that if the contract be awarded to such bidder, the bidder will enter into an agreement with the Board of Freeholders for the carrying out of the work.

Bids for the above described work will be received by the County Road Committee of the Board of Chosen Freeholders of the County of Union, at the Court House, Elizabeth, N. J., at 2.30 p. m., on Tuesday, May 26, 1908.

The Board of Freeholders or its Committee reserves the right to reject any or all bids, as they may deem best for the interests of the County.

JACOB L. BAUER, County Engineer,
215 Broad Street, Elizabeth, N. J.
19-3t

LOCK-GATE HOUSE.

COMMONWEALTH OF MASSACHUSETTS. CHARLES RIVER BASIN COMMISSION.

Sealed proposals will be received at the office of the Charles River Basin Commission, 367 Boylston Street, Boston, Mass., until 2.30 o'clock p. m., of Monday, June 1, 1908, for constructing the lower-lock-gate house which is to be built over the lower gate recess at the lock in the Charles River Dam. Pamphlets containing further information for bidders, forms of proposal, contract and specifications will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 367 Boylston Street, Boston, where also plans may be seen. It is expected that the pamphlets and plans will be ready about Tuesday, May 12, 1908. Sets of plans may be taken from the office upon making a deposit of two dollars for each

set taken; this deposit to be refunded upon return of the plans. The printed form must be used in making proposals. The Commission reserves the right to reject any or all proposals and to accept the proposal deemed best for the Commonwealth. HENRY D. YERXA, Chairman; JOSHUA B. HOLDEN, EDGAR R. CHAMPLIN, Charles River Basin Commission; HIRAM A. MILLER, Chief Engineer; WILLIAM S. YOUNGMAN, Secretary. 19-2t

COUNTY BRIDGES.

Westchester County, N. Y.

Sealed proposals for the construction of two Highway Bridges at Croton Falls, N. Y., and for repairs to bridge near Ossining, N. Y., will be received by the undersigned until May 29, 1908.

Alternative plans and specifications have been prepared for Reinforced Concrete Arch Bridge having a span of 92 feet and for a Pony Truss Steel Bridge having a span of 82 feet.

Plans have also been prepared for a Plate Girder Bridge having a span of 50 feet and for repairs to abutments and trusses of Iron Bridge.

Bids must be in sealed envelope addressed to George I. Ruscoe, Supervisor Town of Poundridge, New Canaan, Conn., and marked "Proposal for Building Bridges over Croton River."

Bids must be accompanied by certified check for a sum equal to ten per cent. of proposals, made payable to the County Treasurer, Westchester County, N. Y.

Plans and specifications may be seen at the office of the County Engineer, National Bank Building, Tarrytown, N. Y., or may be procured from him on deposit of five dollars ($5.00), which will be refunded on return of the plans and specifications.

(Signed) GEORGE I. RUSCOE,
Chairman Committee on Roads and Bridges.
EBERHARD J. WULFF,
County Engineer. 19-3t

ROADS.

Essex County, N. J.

Sealed proposals will be received by the Committee on Roads and Assessments of the Board of Chosen Freeholders of the County of Essex, State of New Jersey, for grading and paving with telford pavement the following roads:

Central Avenue and Green Brook Avenue, in the Boroughs of Caldwell, West Caldwell and North Caldwell, from Bloomfield Avenue to the line of Caldwell Township, a distance of about 14,934 feet.

West Fairfield and Clinton Road in the Township of Caldwell from Fairfield Road to Horseneck Road, a distance of about 11,162 feet.

Each road to be bid for separately and each bid to be accompanied by a certified check for One Thousand Dollars ($1,000), payable to the Board of Chosen Freeholders to insure the execution of the necessary contract, and to be endorsed on the outside with the name of the bidder and the work he proposes to do.

Plans and specifications may be seen at Room 312, Court House, between the hours of 9 and 12 a. m. and 1 and 4 p. m.

Bids will be received on Monday, June 8, at 3 p. m., at the office of the Committee on Roads and Assessments, Room 312, Court House, Newark, N. J., and at no other time or place.

The Committee reserves the right to reject any or all bids.

MICHAEL BARRY,
Director.
Newark, N. J., May 5, 1908. 19-4t

BRICK PAVING.

Muncie, Ind.

Sealed proposals will be received by the Board of Public Works until 2 o'clock P. M., May 19th, 1908, for furnishing material and labor for grading and paving with brick the following streets:

West Main Street, from High
Street to Kilgore Ave.....6,553 sq. yds.
East Main Street, from Madison
Street to Ohio Ave.....8,851 sq. yds.
Liberty Street, from Seymour
Street south to the Ft. W.
C. & L. Ry.....2,461 sq. yds.

Plans, specifications, etc., are on file in the office of the Board.

The right is reserved to reject any and all bids.

J. A. JACKSON,
City Clerk.
JOHN O. POTTER,
City Engineer. 19-2t

CONCRETE RESERVOIRS.

MONTEREY WATER-WORKS AND SEWER COMPANY, LIMITED.

NOTICE TO CONTRACTORS.

The above company is prepared to receive tenders from competent contractors for the lining and roofing of two reinforced concrete service reservoirs, each of ten million gallons capacity, and inlet and outlet chambers, valve houses and other incidental work in connection therewith, for the water supply of the city of Monterey.

The materials for the works will be supplied by the company, all the necessary plant and labor for their complete execution being provided by the contractor.

Sealed tenders, addressed to Manager of the Monterey Water-Works & Sewer Company, Limited, will be received at the offices of the company, 161 Matamoros Street, on or before Monday the 18th day of May, at 12 o'clock noon.

Plans and specifications may be seen and blank proposal forms obtained on personal application to the undersigned. The company reserves the right to reject any or all the bids.

(Signed) G. R. G. CONWAY,
Chief Engineer.
161 Matamoros St., Monterey, N. L., Mexico. April 25th, 1908. 19-2t

LIGHTING FIXTURES.

Wilkes-Barre, Pa.

Sealed proposals for the furnishing and installation complete of Electric Lighting Fixtures for the new Luzerne County Court House will be received at the office of the County Controller of Luzerne County, at Wilkes-Barre, Pa., on Friday, June 5th, 1908, at 2 o'clock p. m.

Plans and specifications may be seen at the office of the County Commissioners of Luzerne County or at the offices of McCormick & French, Architects, Second National Bank Building, Wilkes-Barre, Pa.

An appropriation of $35,000 has been made for this work.

All bids must be accompanied with a certified check for 3 per cent. of the amount of the bid.

The County Commissioners reserve the right to reject any or all bids.

JAMES M. NORRIS,
Controller.
JAMES A. DEWEY,
Deputy.
Wilkes-Barre, Pa., April 30, 1908. 19-2t

SEWERS.

Huntingdon, Pa.

Sealed proposals will be received at the office of the Borough Engineer in the Borough of Huntingdon, Pa., until 2 P. M., May 15, 1908, for constructing sewers in Huntingdon, Pa.

Terms of proposals, copies of specifications and instructions to contractors may be obtained of the engineer and the plans and profiles may be seen at his office.

Approximate length of sewers to be constructed:

5 inch 5,000 ft.	12" 900 ft.	18" 800 ft.
10 inch 6,000 ft.	15" 2,400 ft.	20" 1,420 ft.
22 inch 2,000 ft.		

Manholes, 33. Lantern holes, 11

The Sewer Committee reserves the right to reject any or all bids.

Address, J. MURRAY AFRICA,
Borough Engineer.
J. R. PATTON,
Clerk of Council. 19-1t

CONCRETE SEWER.

Chillicothe, O.

Sealed bids will be received by the Board of Public Service of the City of Chillicothe, Ohio, at the office of said Board until twelve o'clock noon,

THURSDAY, MAY 28, 1908,

for the construction of 3,000 feet of reinforced concrete, storm-water sewer (estimated cost $30,000), according to plans and specifications on file in said office.

Bid sheets will be furnished on application.

By order of the Board of Public Service.

H. M. REDD,
City Engineer.
19-1t

SEWERS.

East Rutherford, N. J., May 4th, 1908.

Separate, sealed, proposals will be received by the Sewer Committee of the Borough Council of the Borough of East Rutherford, N. J., at 8.00 P. M., Monday, May 25, 1908, at the Municipal Building, East Rutherford, N. J., for the construction of a system of sewers for the Borough of East Rutherford.

There will be, approximately, fourteen and one-half miles of sewers (exclusive of house connections of 6" pipe), varying from 8" to 24" in diameter, required.

A certified check for $2,500.00 must accompany the bid. The right to reject any or all bids, or to accept that which is deemed best for the Borough, is expressly reserved.

Plans may be seen and specifications and forms of proposals may be obtained at the office of the Borough Clerk, or at the office of Messrs. Wise & Watson, Civil and Sanitary Engineers, Rutherford, N. J.

By order of the Mayor and Council.

CHAS. B. JOHNSON,
Borough Clerk.
19-2t

ELEVATORS.

Wilkes-Barre, Pa.

Sealed proposals for the furnishing and installation of two passenger elevators of the Hydraulic Plunger Type in the new Luzerne County Court House will be received at the Office of the County Controller of Luzerne County, at Wilkes-Barre, Pa., on Friday, May 22d, 1908, at 2 o'clock p. m.

Plans and specifications may be seen at the office of the County Commissioners or the offices of McCormick and French, Architects, Second National Bank Building, Wilkes-Barre, Pa.

All bids to be accompanied by a certified check for 3 per cent. of the amount of bid.

The County Commissioners reserve the right to reject any or all bids.

JAMES M. NORRIS,
Controller.
JAMES A. DEWEY,
Deputy.
Wilkes-Barre, Pa., April 30, 1908. 19-2t

SEWER EXTENSION.

Brantford, Ont., Canada.

Sealed tenders, addressed to Samuel Sudday, Esq., Chairman of the Board of Works, in care of the City Clerk, Brantford, Ont., will be received till 12 o'clock noon on Thursday, May 21st, 1908, for the following:

(a) The furnishing and laying of about 1,700 feet of double strength 15-in. Sewer Pipe. Average cut, 10¾ feet.

(b) The laying of about 2,000 feet of 12-in. Sewer Pipe. Average cut, 18 feet; and 750 feet of 12-in. cast-iron pipe, including crossing of Grand River. Average cut, 7 feet. These pipes furnished by the city.

(c) The furnishing and laying of about 1,750 feet of 12-in. extra strength Sewer Pipe and 450 feet of 12-in. cast-iron pipe. Average cut, 16 feet.

Plans and specifications may be seen and instructions to bidders and forms of tender obtained at the City Engineer's Office.

Each tender must be accompanied by a marked cheque for 5 per cent. of the amount of the tender.

The lowest or any tender not necessarily accepted.

T. HARRY JONES,
City Engineer.
Brantford, Ont., April 27th, 1908. 19-2t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., April 29, 1908.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 27th day of May, 1908, and then opened, for metal vault shelving for the U. S. Post Office, Court House and Custom House, Superior, Wisconsin, in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the Architects, Messrs. Barber and Barber, 210 Hammond Block, Superior, Wisconsin, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 19-2t

SEALED PROPOSALS, marked "Proposals for pipe system, Neosho, Missouri," and inclosed in an envelope addressed "Commissioner of Fisheries, Department of Commerce and Labor, Washington, D. C.," will be received at this office until 2 p. m. on June 6, 1908, and then be opened, for the construction of Reservoir and Pipe System at the United States Fisheries Station, Neosho, Missouri. The right is reserved to reject any and all bids, to waive any defects, and to accept any part of any bid and reject the other part. For specifications, plans, blank proposals, and full information, address Commissioner of Fisheries, Washington, D. C., or Superintendent, Fisheries Station, Neosho, Missouri. 19-2t

OFFICE CONSTRUCTING QUARTERMASTER, U. S. A., 263 Summer Street, Boston, Mass., April 30, 1908.—Sealed proposals, in triplicate, will be received at this office until 10 o'clock a. m., May 29, 1908, and then opened, for the construction, including plumbing, heating, electric wiring and fixtures, of a Brick Bakery at Fort Andrews, Peddock's Island, Boston Harbor, Mass. Plans can be seen, and specifications, blank forms and all information obtained at this office. United States reserves the right to reject any or all proposals. Envelopes should be endorsed "Proposals for Bakery, Fort Andrews, Mass." and addressed to CAPTAIN IRA L. FREDENDALL, Constructing Quartermaster. 19-3t

FT. MONROE, VA., April 29, 1908.—Sealed proposals, in triplicate, will be received until 10 a. m., June 1, 1908, for the erection of 4 fifty-thousand-gallon steel water tanks on parapet at Ft. Monroe, Va. Bidders must state trade names and addresses of manufacturers supplying them materials.

Sealed proposals in triplicate will be received at the same time for the filling in of twenty-one old cisterns. Plans, specifications and information furnished upon application. U. S. reserves the right to accept or reject any or all proposals or any part thereof. ERNEST R. TILTON, Captain and Constructing Quartermaster. 19-1t

OFFICE CONSTRUCTING QUARTERMASTER, U. S. A., 263 Summer Street, Boston, Mass., May 2, 1908.—Sealed proposals, in triplicate, will be received at this office until 11 o'clock a. m., June 1, 1908, and then opened, for grading, constructing macadam roads, concrete walks, etc., at Fort Andrews, Peddock's Island, Boston Harbor, Mass. Plans can be seen, and specifications, blank forms and all information obtained at this office. United States reserves the right to reject any or all proposals. Envelopes should be endorsed "Proposals for Grading, Roads, Walks, etc., Fort Andrews, Mass." and addressed to CAPTAIN IRA L. FREDENDALL, Constructing Quartermaster. 19-4t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 2, 1908.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 10th day of June 1908, and then opened, for the installation of a conduit and electric wiring system in the Extension of the U. S. Post-Office and Court-House Building at Ogden, Utah, in accordance with drawings and specifications, copies of which may be had at this office, or at the office of the Superintendent of Construction, Ogden, Utah, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 19-2t

SEALED PROPOSALS will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 1 o'clock p. m., June 4, 1908, and then opened, for furnishing the material and labor of all kinds necessary for the construction and delivery of the Southwest Ledge Light-House, New London Harbor, Connecticut, in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to the Light-House Engineer, Tompkinsville, N. Y. The right is reserved to reject any or all bids, and to waive any defects. 19-2t

Situations Open

WANTED—Foreman for State road work; also steam road roller runner and traction engine runner. Address "M. 19." Engineering News, New York. 19-1t

WANTED—By technical college in Middle West, by Sept. 1, 1908, instructor in structural engineering. Must be technical graduate, good draftsman, and have had experience in structural steel. Salary, $1,000.00 to $1,200.00, depending on qualifications. Address "A. A. 19." Engineering News, New York. 19-2t

WANTED—Managing Engineer. To take general charge of sales correspondence, and office management for large company exploiting well established system of built-up concrete reinforcement. Must be a man of high ability, sound commercial training, and with broad experience in reinforced concrete work. Address "Z. A. 19." Engineering News, New York. 19-2t

Miscellaneous Wants

WANTED—To buy a copy of French Publication "Revue De Mecanique" of June, 1902. Address E. H. NATE, 117 West Side Ave., Jersey City, N. J. 19-1t

WANTED TO RENT

A One Yard Steam Shovel

with crew for several months' work on Staten Island.

WILLIAM A. ENGEMAN,
New Brighton, Staten Island, N. Y. 19-2t

FOR SALE

FOR SALE.

Traction Steam Shovels

1—¼-yd. Dipper on Traction Wheels:

No. 1129; three engines; new 1907. High crane, giving 16-ft. lift.

No. 1119; three engines; first-class shovel; attractive price.

No. 1045; two engines; friction feed; good shape.

No. 801; three engines; just from service.

No. 411; three engines; just from service.

No. 130; two engines; friction feed; good condition.

No. 1127; especially built for trenching; practically new.

My circular No. 36 contains twelve pages good snappy bargains in Steam Shovels, Dinkies, Cars, Rails, Concrete Mixers and Contractors' equipment generally. Copy upon request.

JOHN B. WATSON,
Drexel Building, Philadelphia, Pa.
'Most everything for the Contractor.

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The following Plans (
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